



Microsoft Azure

Joe Losinski
Partner Technology Strategist

In this session...

Digital transformation in context

Azure overview

Azure's unique approach

Proven operational practices for Azure

Azure Government



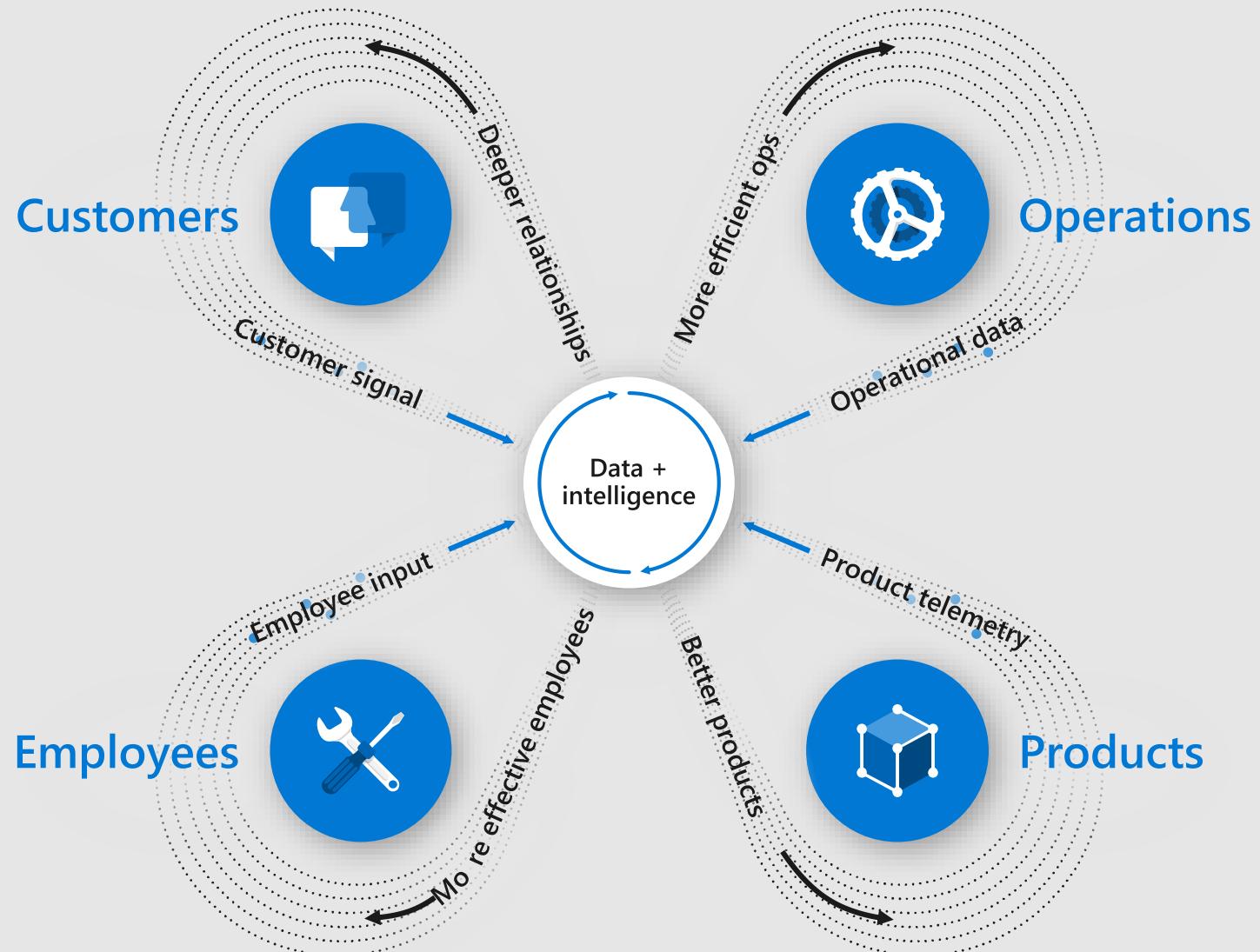


Software is being infused in every part of a business, making every company a **software** company



The digital feedback loop

- 1 Data: Capture digital signal across business
- 2 Insight: Connect and synthesize data
- 3 Action: Improve business outcomes



1 Data: Capture digital signal from across business

Consumer Reports review indicate braking issue with Model 3

Vehicle telemetry shows brake performance across fleet

2 Insight: Connect and synthesize data

Car telemetry for suspect cars analyzed to understand issue

Tesla identifies fix to improve stopping distance

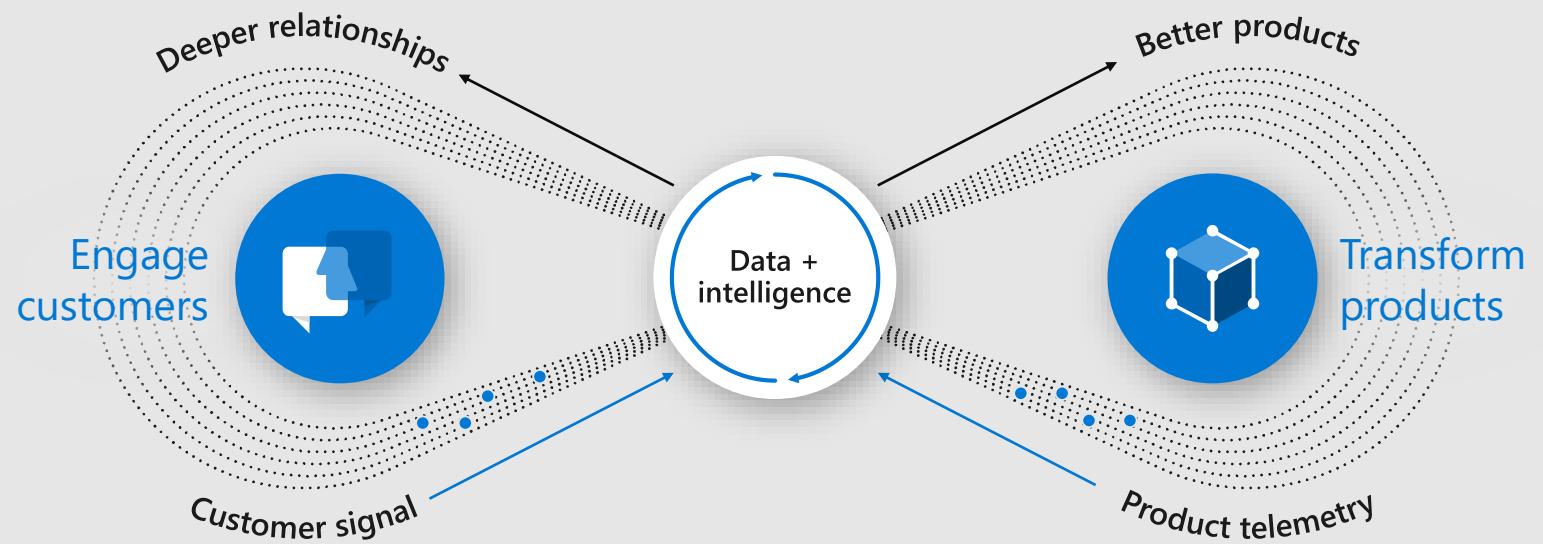
3 Action: Improve business outcomes

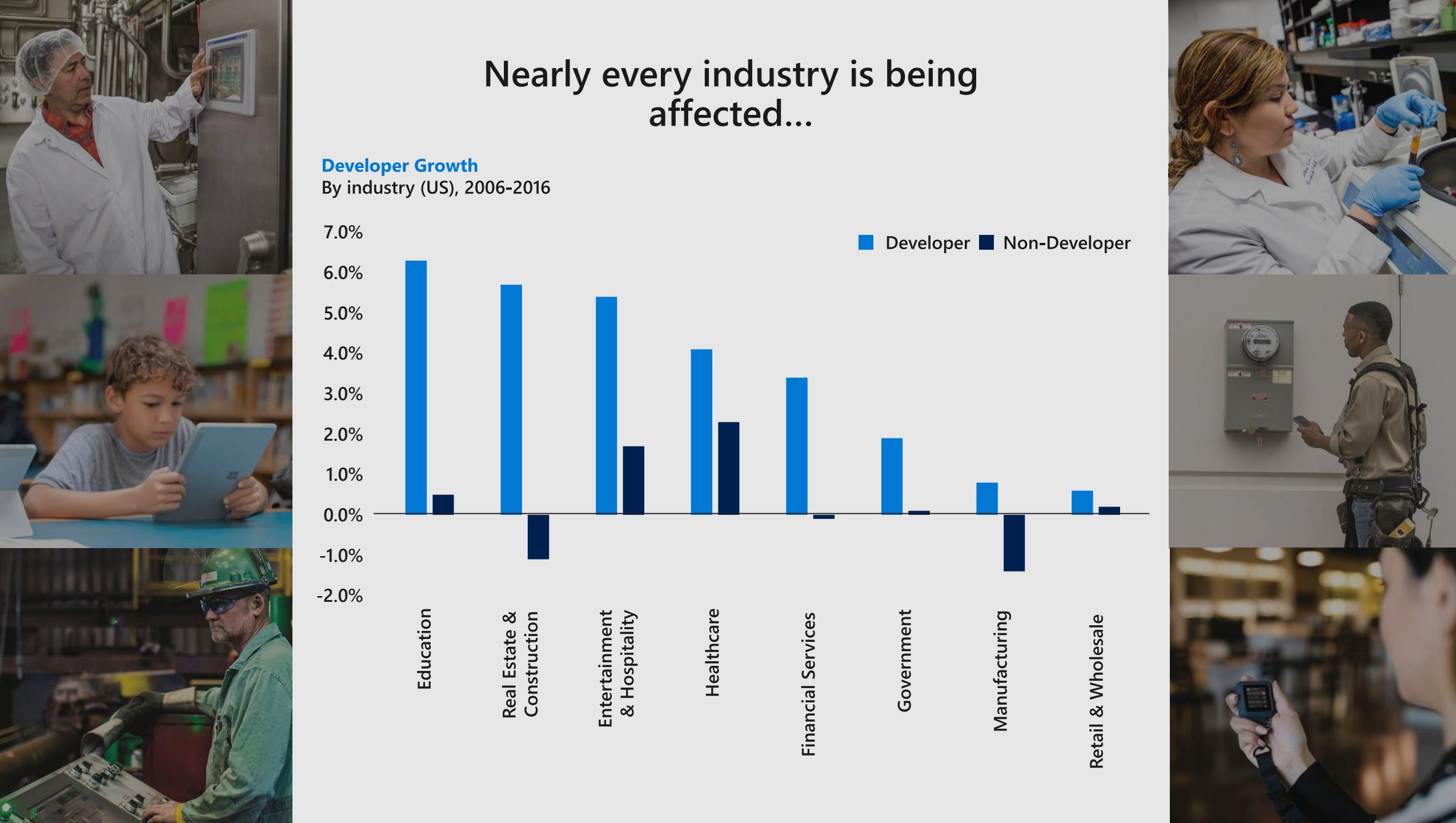
Car braking software updated over-the-air to fix issue

Tesla closes the loop with consumer reports and review is updated



The digital feedback loop

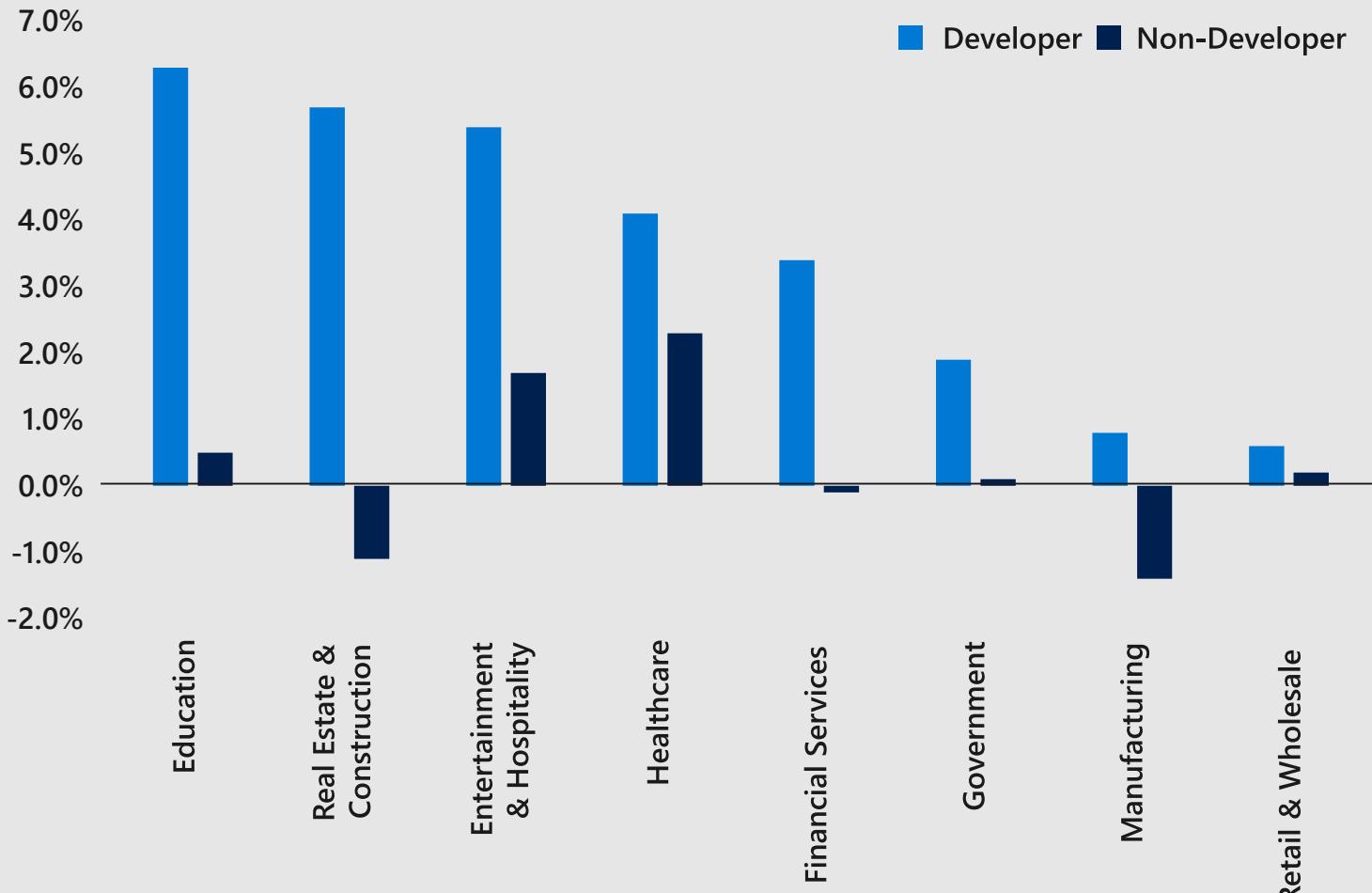




Nearly every industry is being affected...

Developer Growth

By industry (US), 2006-2016



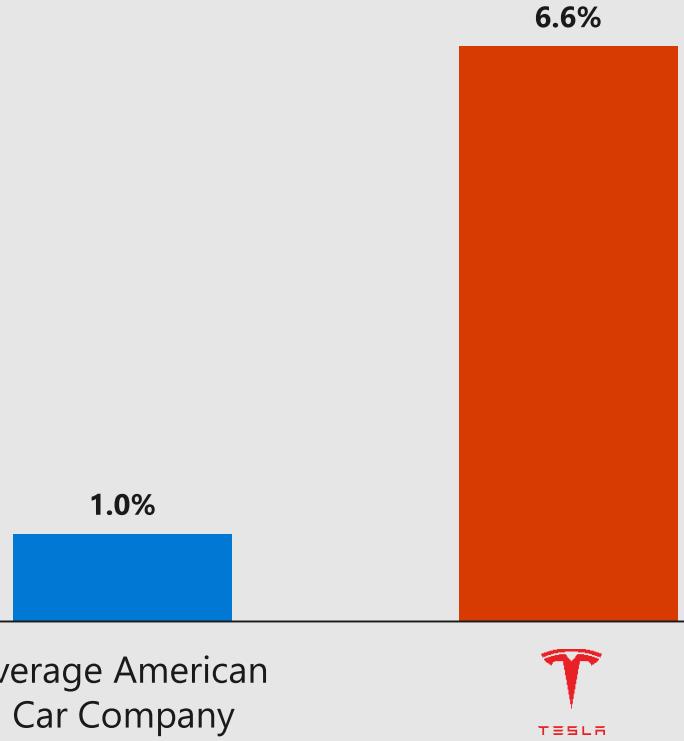


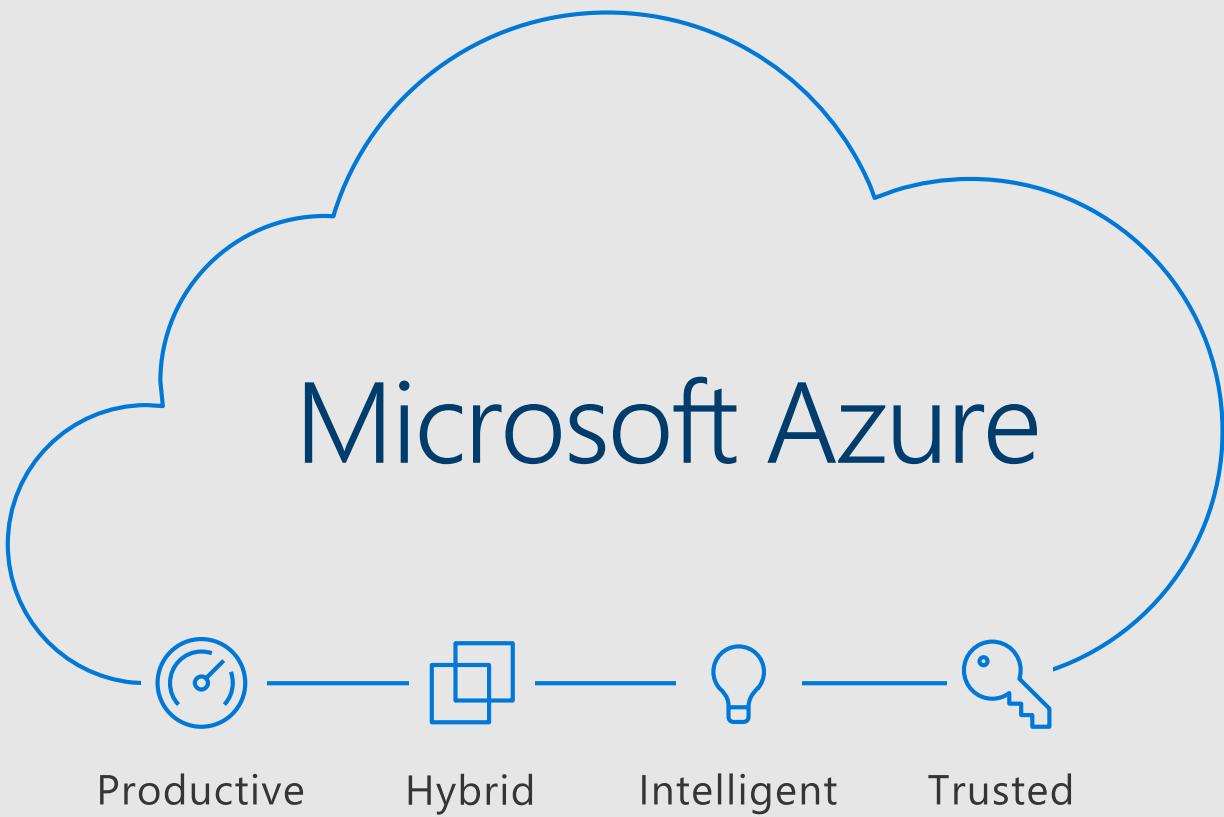
Role of software in Automotive



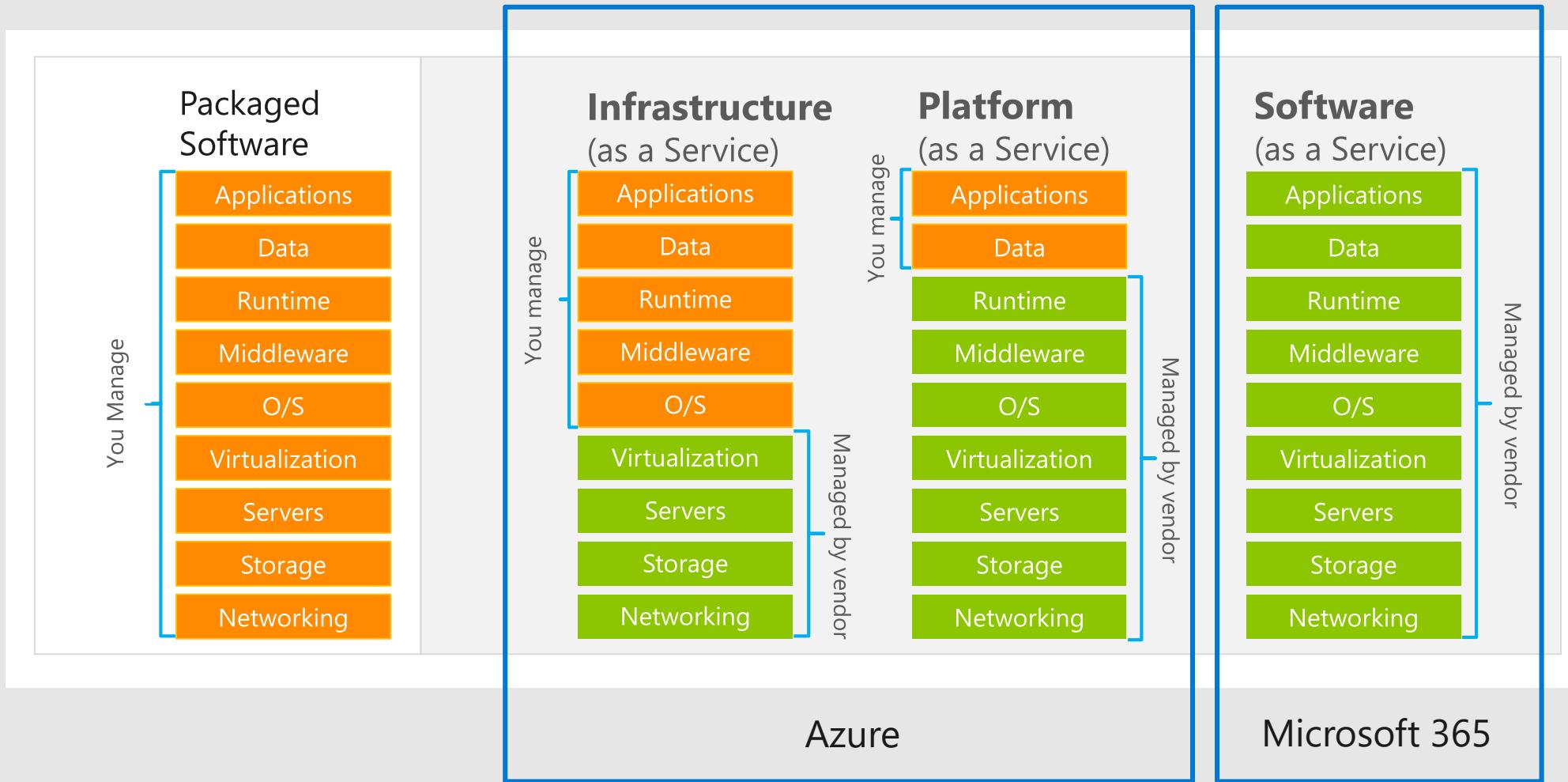
Role of SW in Auto

Developers as a % of Overall Headcount

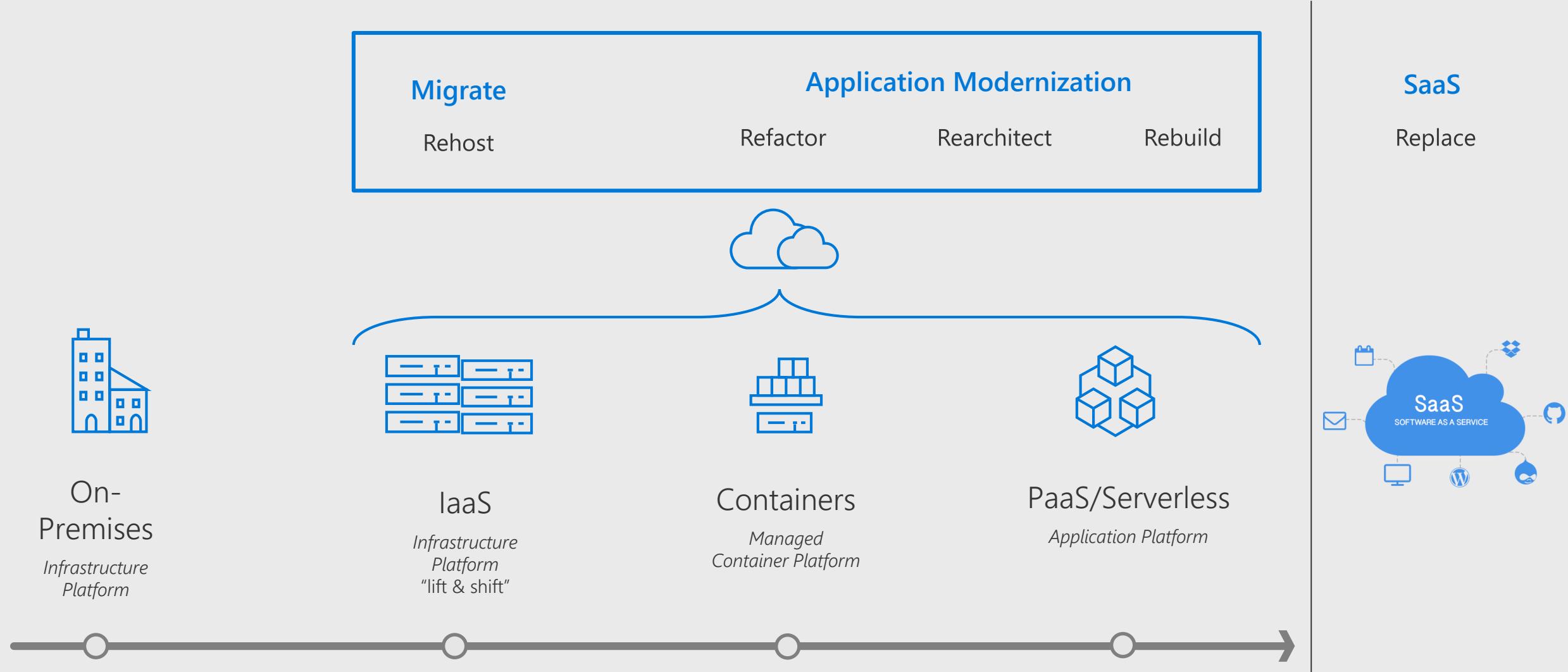




Azure is Microsoft's cloud computing platform



The Journey to the cloud



Security & Management

- Security Center
- Portal
- Azure Active Directory
- Azure AD B2C
- Multi-Factor Authentication
- Automation
- Scheduler
- Key Vault
- Store/ Marketplace
- VM Image Gallery & VM Depot

Media & CDN



Integration

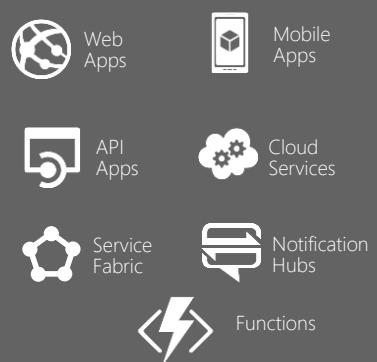


Compute Services



Platform Services

Application Platform



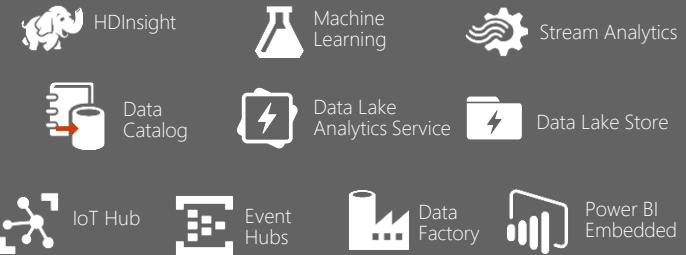
Data



Intelligence



Analytics & IoT



Infrastructure Services

Compute



Storage



Networking



Datacenter Infrastructure

Hybrid Cloud



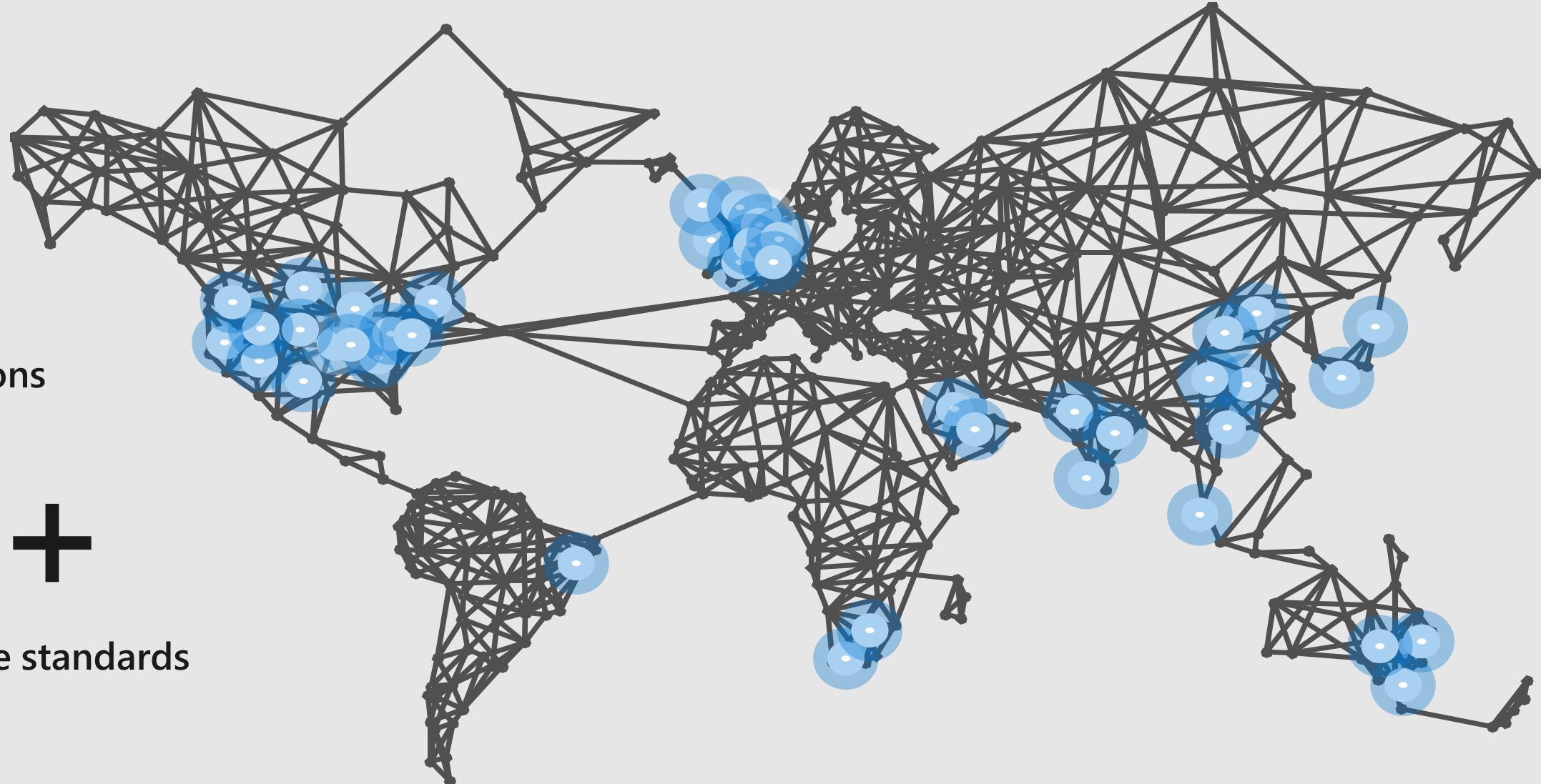
Build, manage and deploy applications on a massive global network

54

Azure regions

90 +

Compliance standards



Works with popular tools and frameworks

Management



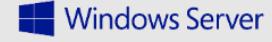
Databases & middleware



Applications



Infrastructure



App frameworks



		 Save money. Live better.			
Rockwell Automation			 Empowering Healthcare		
					
			 Building a better working world		
		 The Banking Software Company			 HarperCollins

>95%
of Fortune 500 use
Microsoft Azure

Monitoring Location-based Authentication
Serverless Event driven Compute Orchestrators
Machine Learning Compliance Mixed Reality
Haptics Containers Edge GPU
NoSQL Automation DevOps Quorum
Quantum computing Microservices Log telemetry
Data privacy IoT Digital Twin Blockchain
Hybrid cloud Beacons Big data Bots
Artificial Intelligence Threat Intelligence
Ambient UX

Azure provides best in class performance



Compute
performance

960
CPUs

Largest in public cloud



Memory

24
TB RAM

Largest in public cloud



Remote Storage
(single disk)

160K
IOPs

Fastest in public cloud



Local
storage

3.7M
IOPs

Fastest in public cloud



File storage

100K
IOPs

Fastest in public cloud



VM-VM Networking

30

Gbps Ethernet

Fastest in public cloud

100

Gbps InfiniBand



Hybrid Networking

100

Gbps Connectivity

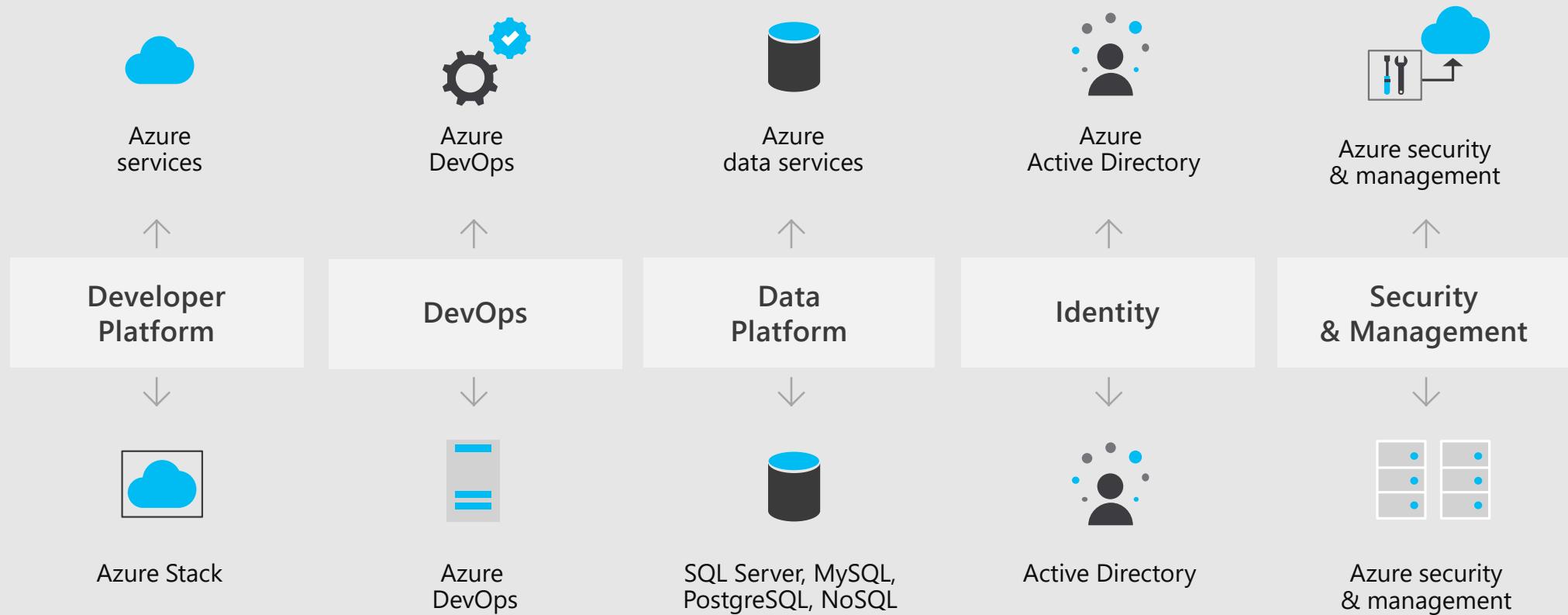
Fastest in public cloud

Purpose-built
Azure infrastructure for
enterprise workloads

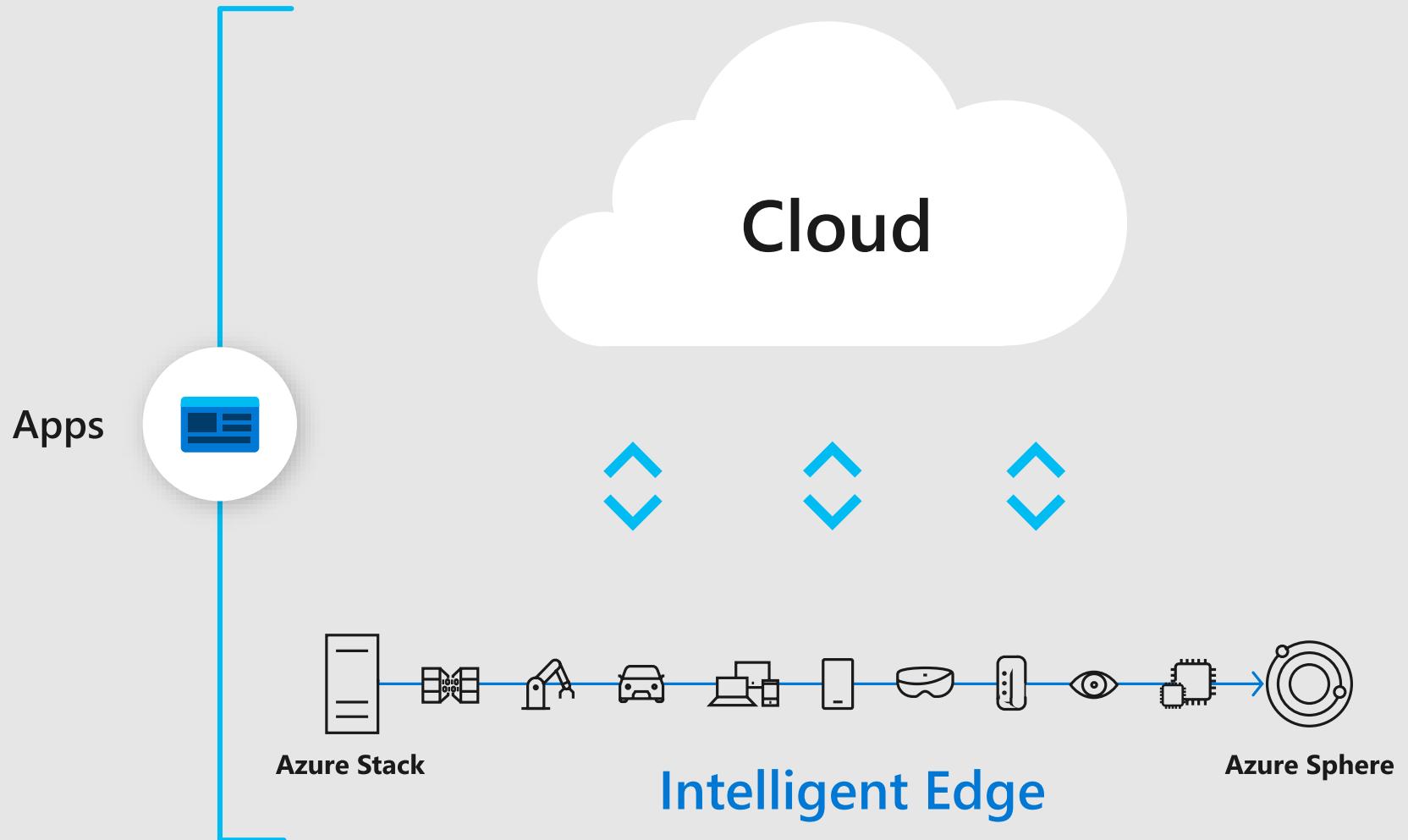


Azure: Hybrid

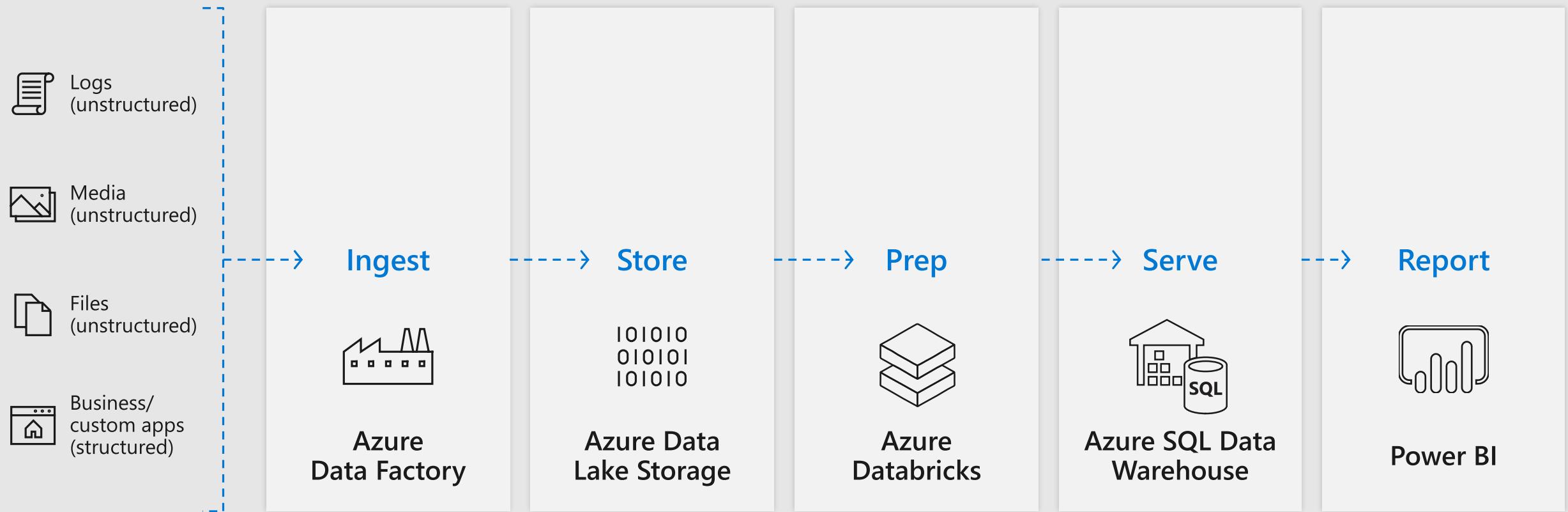
The only consistent, comprehensive hybrid cloud



Tomorrow



Cloud Scale Analytics



Machine learning

Sophisticated pretrained models

To simplify solution development

Popular frameworks

To build advanced deep learning solutions

Productive services

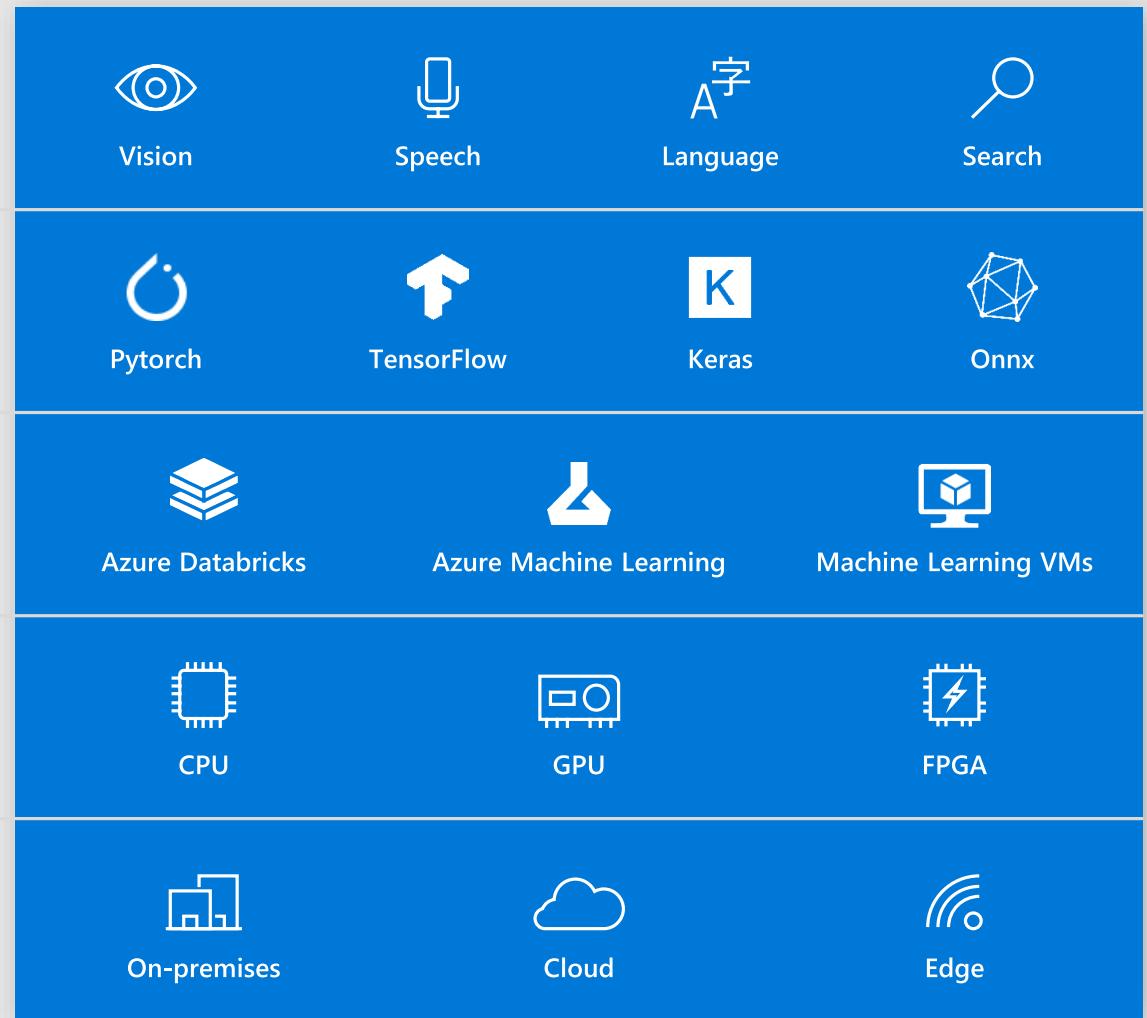
To empower data science and development teams

Powerful infrastructure

To accelerate deep learning

Flexible deployment

To deploy, manage models on intelligent cloud & edge



Top 10 reasons to choose Azure infrastructure



#1

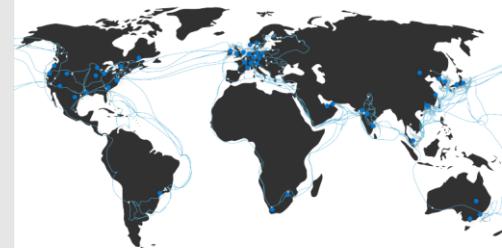
95% of Fortune 500 companies use Azure



#2

Massive global scale

54 regions worldwide 130+ edge sites 140+ countries



#3

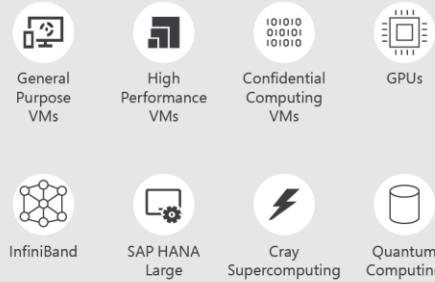
A full range of open source support



Nearly half of Azure compute workloads run on Linux

#4

A broad portfolio of compute options



#5

Ultra-fast connectivity

Azure ExpressRoute 100 Gbps

VM to VM Bandwidth 30 Gbps



#6

Unparalleled disk performance

160,000 IOPS
highest IOPS per disk

2,000 MB
broadest bandwidth

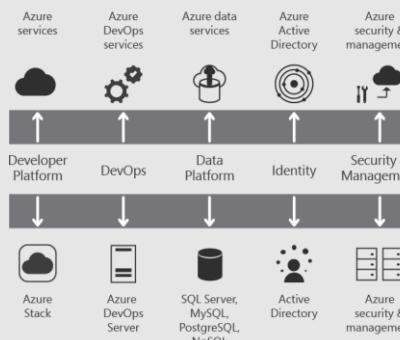
Sub-millisecond latency



Single disk storage capacity
4GiB – 64 TiB

#7

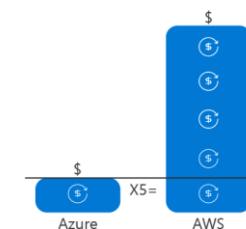
The only consistent, comprehensive hybrid cloud



#8

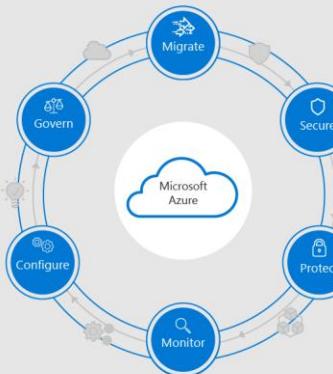
Cost effective for Windows Server, SQL Server and Linux

AWS is 5X more expensive
when migrating Windows Server and SQL Server 2008/R2 to Azure



#9

The broadest built-in management tools



#10

The trusted and most compliant cloud

Unmatched security



\$1B+
annual investments



3500+
security experts

Most comprehensive



85+
compliance offerings



40+
offerings for regulated industries

To learn more, visit: <https://docs.microsoft.com/en-us/learn/azure/>

Copyright © 2018 Microsoft, Inc. All rights reserved. This infographic is intended for informational purposes only. Microsoft makes no warranties, express or implied, with respect to the information presented here.

Eight Questions You Should Ask



- Who has access to my data?
- Are they certified to operate in a compliant environment?
- Where is my data stored?
- How is my data isolated?
- What happens if there is a problem?
- What is the response to a legal request?
- What is the vendor's history?
- What is the product roadmap?

Azure: Trusted

Global



ISO 27001



ISO 27018



ISO 27017



ISO 22301



SOC 1 Type 2



SOC 2 Type 2



SOC 3

CSA STAR
Self-AssessmentCSA STAR
CertificationCSA STAR
Attestation

Regional

Argentina
PDPAEU
Model
ClausesUK
G-CloudChina
DJCPChina
GB 18030China
TRUCSSingapore
MTCSAustralia
IRAP/CCSLNew
Zealand
GCIOJapan My
Number ActENISA
IAFJapan CS
Mark GoldSpain
ENSSpain
DPAIndia
MeityCanada
Privacy LawsPrivacy
ShieldGermany IT
Grundschatz
workbook

Industry

PCI DSS
Level 1

CDSA



MPAA



FACT UK

Shared
Assessments

FISC Japan

HIPAA/
HITECH Act

HITRUST

GxP
21 CFR Part 11

MARS-E



IG Toolkit UK



FERPA



GLBA



FFIEC

Us Gov

Moderate
JAB P-ATOHigh
JAB P-ATODoD DISA
SRG Level 2DoD DISA
SRG Level 4DoD DISA
SRG Level 5

SP 800-171



FIPS 140-2



Section 508 VPAT



ITAR



CJIS



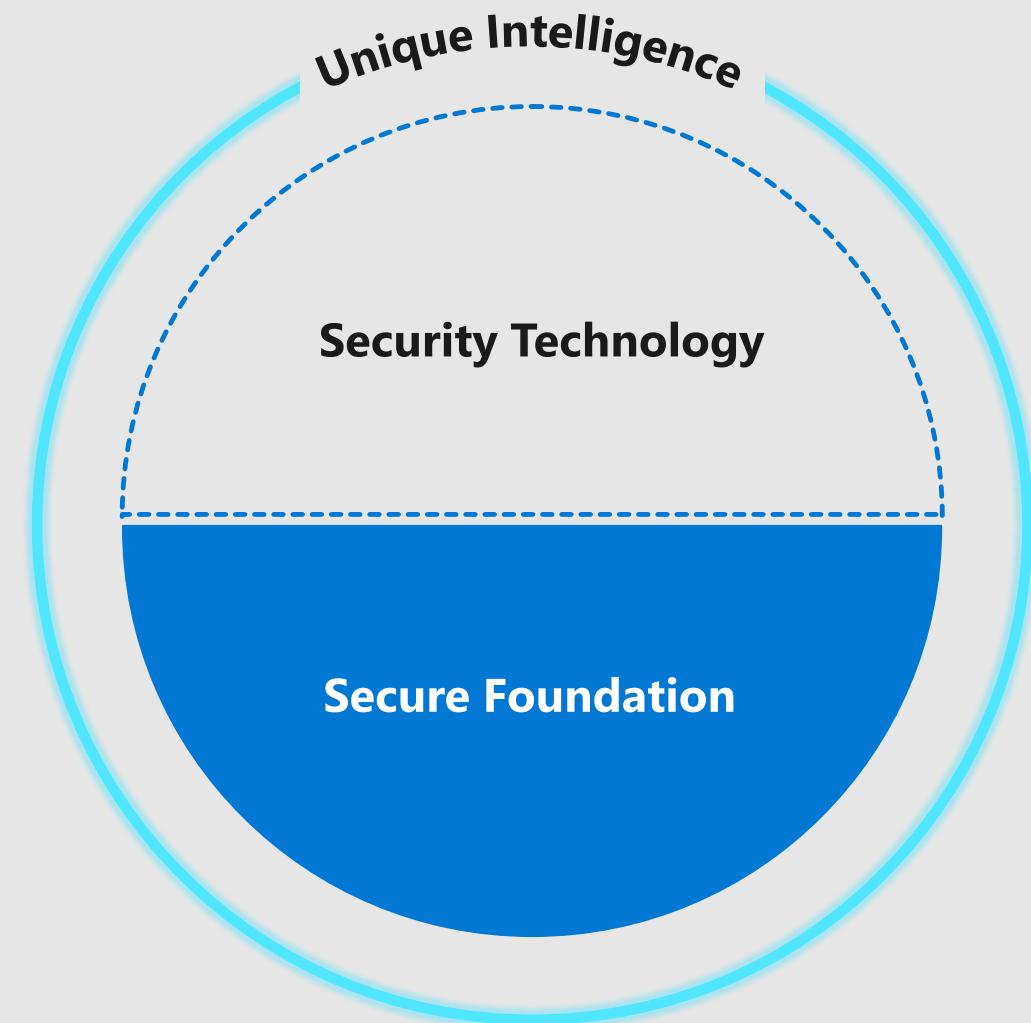
IRS 1075

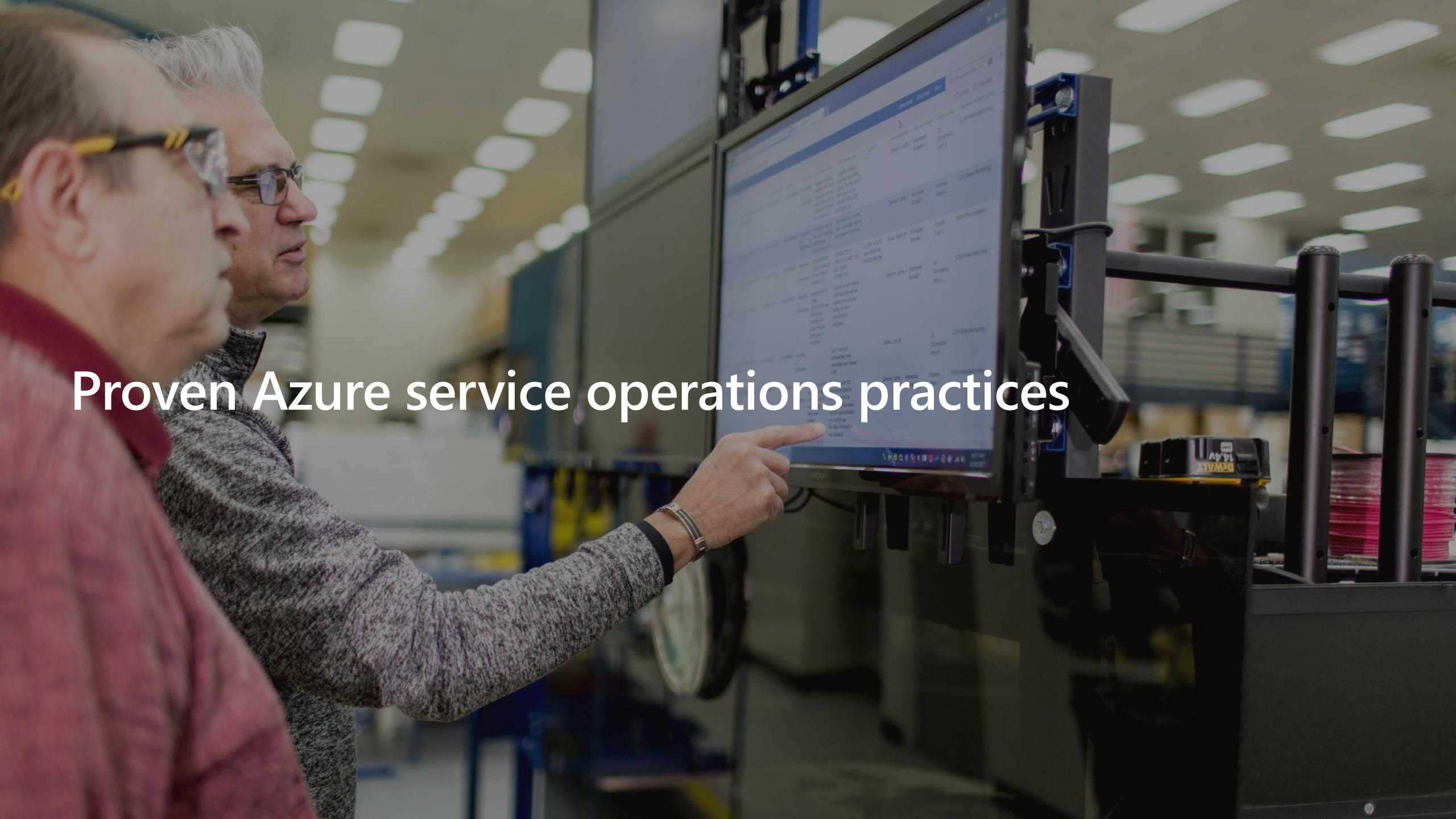
Unmatched security

\$1B+ annual investments

Over 3500 security experts

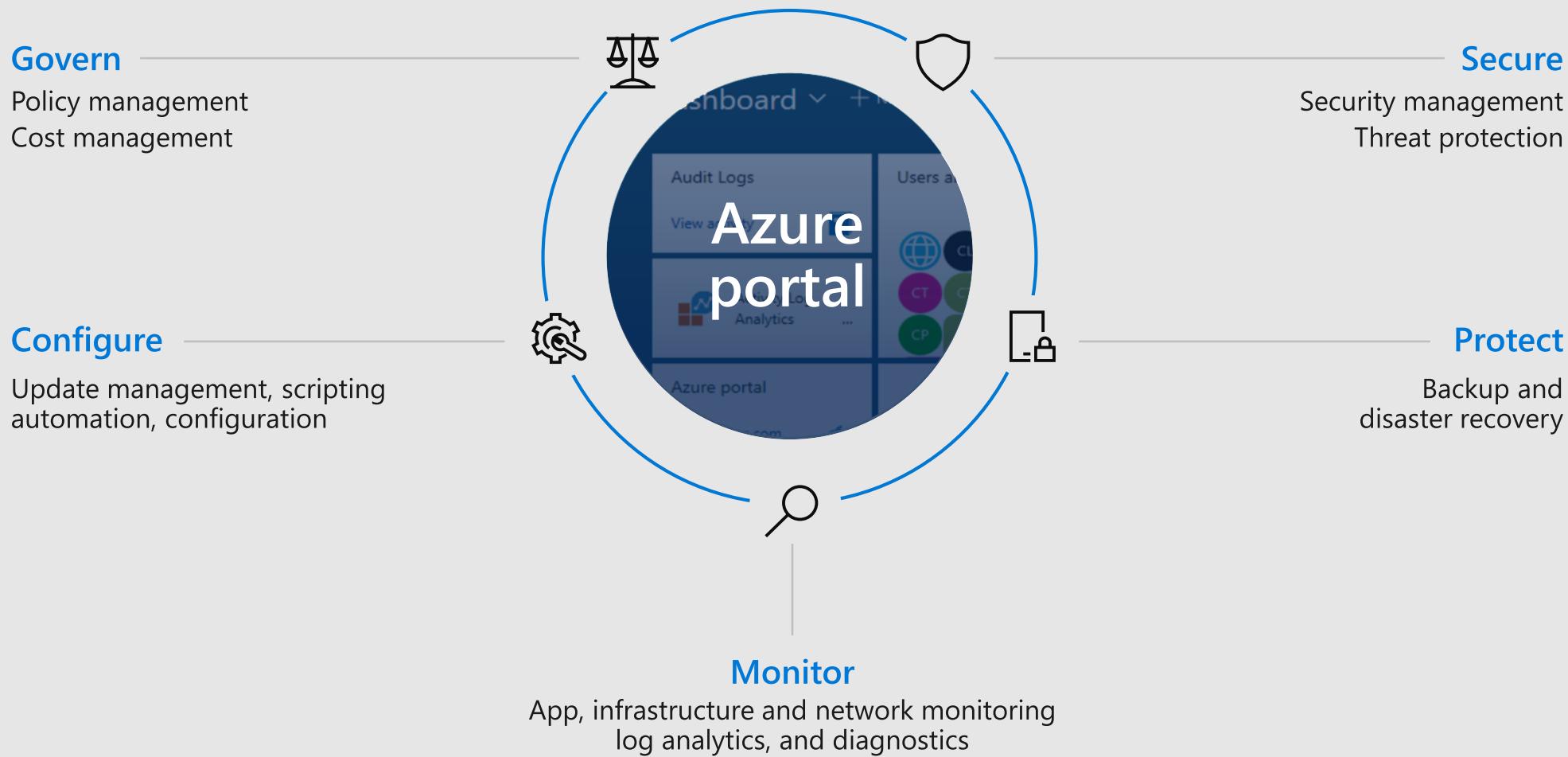
Trillions of diverse signals





Proven Azure service operations practices

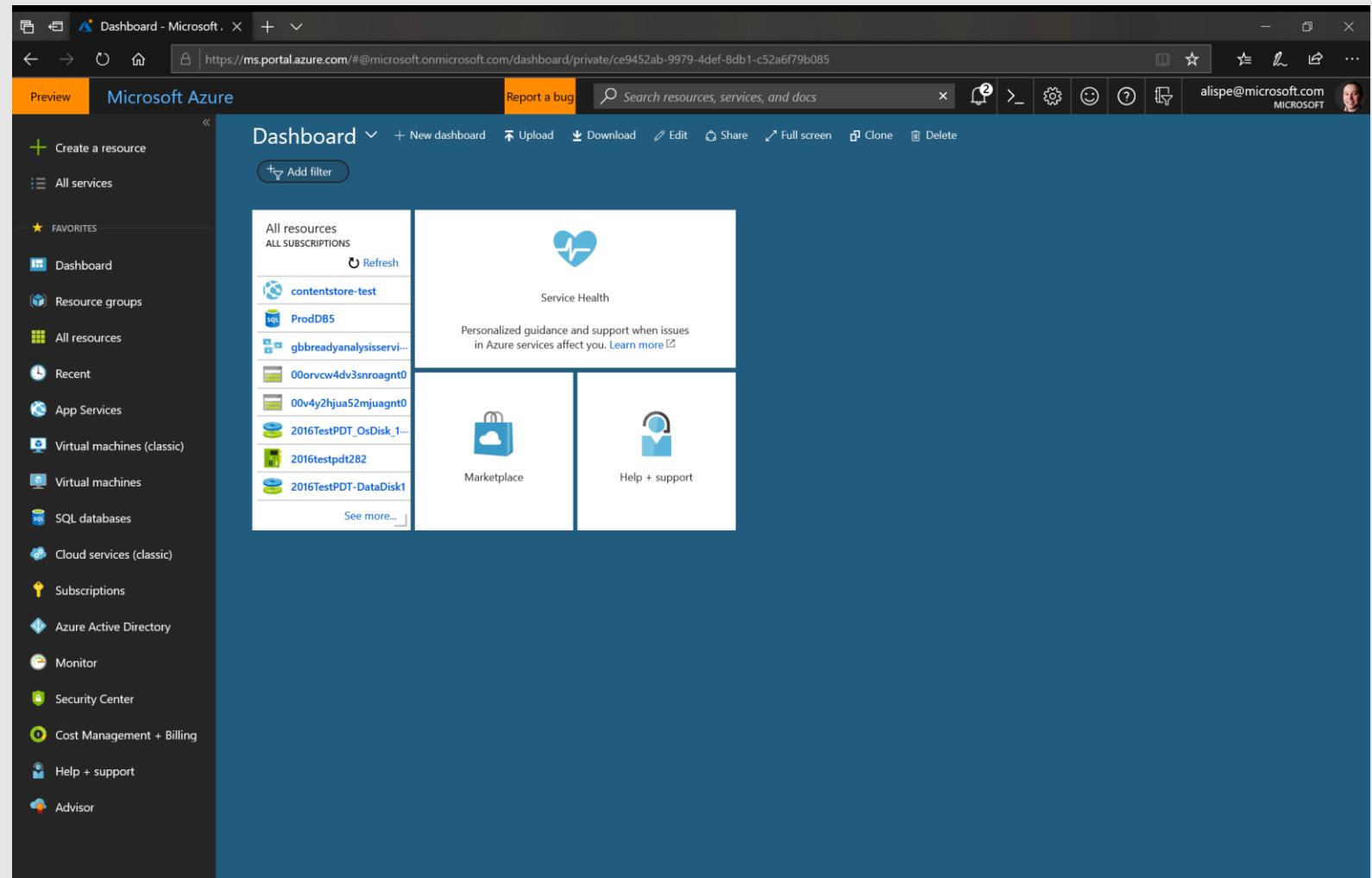
Azure portal offers enterprise-grade management



Azure portal is customizable—portal.azure.com

Recommendation:

Create portal dashboards by key roles,
(e.g., operations, finance, development),
key projects, and key service KPIs.

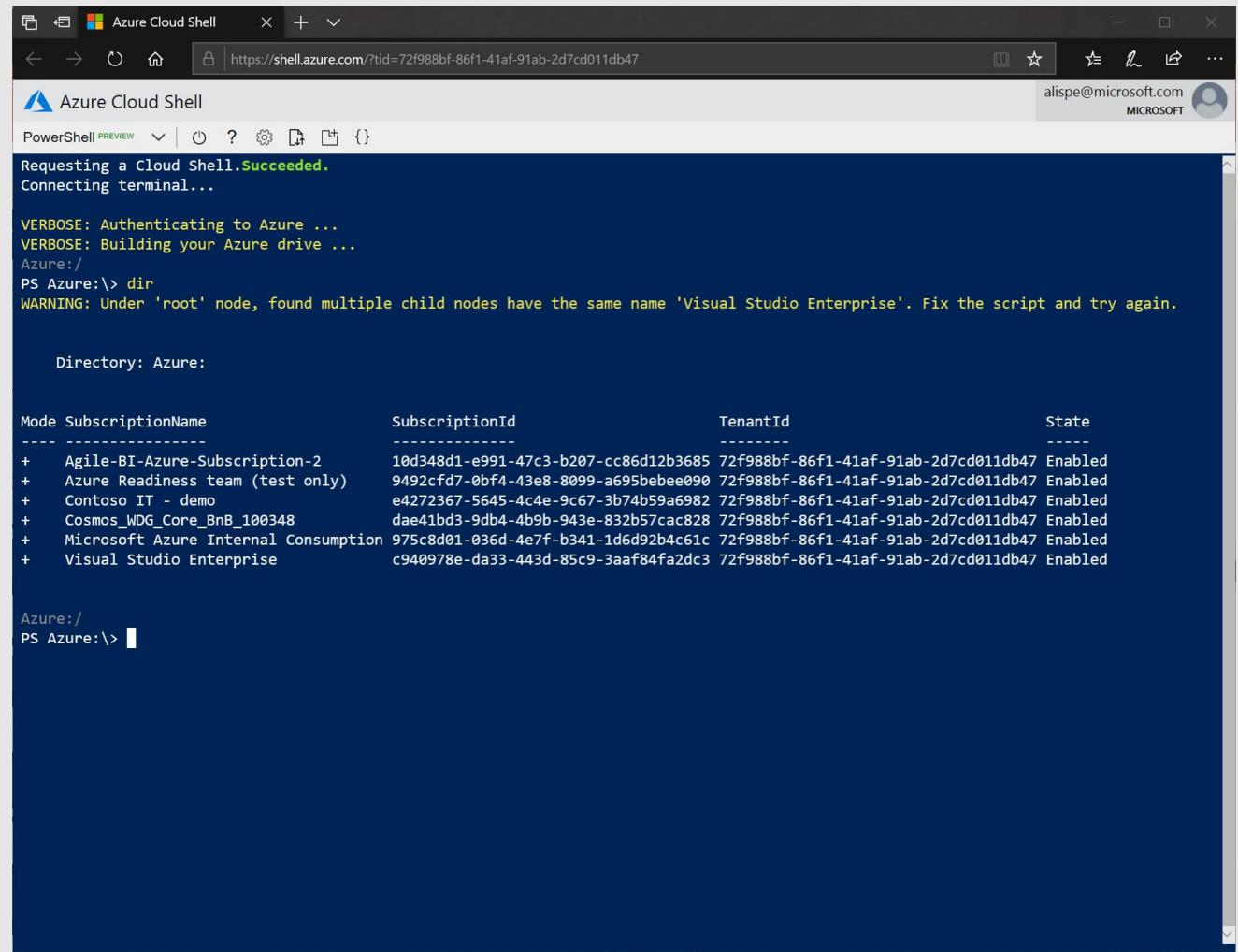


Azure supports automation

Recommendations:

Define ARM templates for commonly used resource configurations

Use Azure Policy to define which resources you allow teams to provision



The screenshot shows the Azure Cloud Shell interface in a browser window. The title bar says "Azure Cloud Shell". The address bar shows the URL "https://shell.azure.com/?tid=72f988bf-86f1-41af-91ab-2d7cd011db47". The user name "alispe@microsoft.com" is visible in the top right corner.

The PowerShell session is running in PREVIEW mode. The output shows:

```
Requesting a Cloud Shell. Succeeded.  
Connecting terminal...  
  
VERBOSE: Authenticating to Azure ...  
VERBOSE: Building your Azure drive ...  
Azure:/  
PS Azure:\> dir  
WARNING: Under 'root' node, found multiple child nodes have the same name 'Visual Studio Enterprise'. Fix the script and try again.  
  
Directory: Azure:  
  
Mode SubscriptionName SubscriptionId TenantId State  
---- -- -- -- --  
+ Agile-BI-Azure-Subscription-2 10d348d1-e991-47c3-b207-cc86d12b3685 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
+ Azure Readiness team (test only) 9492cf7-0bf4-43e8-8099-a695bebee090 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
+ Contoso IT - demo e4272367-5645-4c4e-9c67-3b74b59a6982 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
+ Cosmos_WDG_Core_BnB_100348 dae41bd3-9db4-4b9b-943e-832b57cac828 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
+ Microsoft Azure Internal Consumption 975c8d01-036d-4e7f-b341-1d6d92b4c61c 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
+ Visual Studio Enterprise c940978e-da33-443d-85c9-3aaaf84fa2dc3 72f988bf-86f1-41af-91ab-2d7cd011db47 Enabled  
  
Azure:/  
PS Azure:\>
```

Azure policy for enterprise cloud control and compliance



Enforcement and compliance

Turn on built-in policies or build custom ones for all resource types

Real-time policy evaluation and enforcement

Periodic and on-demand compliance evaluation



Apply policies at scale

Apply policies to a Management Group with control across your entire organization

Apply multiple policies and aggregate policy states with policy initiative

Exclusion scope



Remediation

Real time remediation

Remediation on existing resources (Ignite 2018)

Azure Service Health

aka.ms/AzureServiceHealth



Access a personalized dashboard

Find timely information about service issues, planned maintenance, and health advisories for your resources right from the Azure portal, and pin a filtered view that helps you focus on what's important.



Receive guidance and support

When an Azure issue impacts your resources, Service Health helps you diagnose and get support. You'll receive updates on how Azure is fixing the issue until everything is resolved.



Set up targeted notifications

Azure Service Health integrates into Azure Monitor to alert you and your teams via emails, text messages, and webhook notifications when your business-critical resources are impacted.



Share details and updates easily

Get a link for the issue to use in your problem-management system and download a PDF summary of the issue to share with people who don't have access to the Azure portal.

More information: aka.ms/ash-docs

Azure communicates incidents, upcoming maintenance, and health advisories via Azure Service Health

Using Azure Service Health alerts is **strongly recommended**

Examples of alerts include:

- An alert to email your dev team when a resource in a test/dev subscription is impacted
- An alert to update ServiceNow via webhook when a resource in production is impacted
- An alert to send an SMS to a specific number when resources in a given region are impacted

The screenshot displays the Azure Service Health interface with two main sections: "Service Health - Service issues" and "Service Health - Health history".

Service Health - Service issues (Top Section):

- Search:** Search (Ctrl+ /)
- Filter:** Select filter ...
Subscription: Contoso IT - demo
Region: 28 selected
Service: * Service
- Buttons:** Save filter, Delete filter, Pin filtered world map to dashboard, Create service health alert.
- Tip:** Tip: Pin a personalized Service Health world map tile on your dashboard.
- Map:** A world map showing green dots representing monitored regions.

Service Health - Health history (Bottom Section):

- Search:** Search (Ctrl+ /)
- Filter:** Subscription: Contoso IT - demo, Region: 28 selected, Health Event Type: 3 selected, Time Range: Last week
- Table:** A table listing health events.

ISSUE NAME	TRACKING ID	EVENT TYPE	SERVICE(S)	REGION(S)	START TIME	UPDATED
Log Analytics - West Europe	SFJA-PKO	Service issue	Log Analytics	West Europe	17:42 UTC, 02/07/2018	5 d ago
Action Required Regarding Your Azure Backup ser...	G8_S_-K0	Health advisory	Backup	Australia East,...	16:02 UTC, 02/07/2018	5 d ago
- Summary:** Tracking Id: SFJA-PKO, Get a link, Share this link with your team or use it for reference in your problem management system.
- Impacted services:** Log Analytics
- Impacted regions:** West Europe
- Last update:** (5 d ago)
- Summary of Impact:** Between 17:42 UTC on 07 Feb 2018 and 2:30 UTC on 08 Feb 2018, a subset of customers using Log Analytics in West Europe may have experienced processing delays with workspaces hosted in this region. PRELIMINARY ROOT CAUSE: Engineers determined that a backend service became unhealthy causing delays in Log Analytics queries. MITIGATION: Engineers confirmed that the issue self-healed by the Azure Platform. NEXT STEPS: Engineers will continue to investigate to establish the full root cause and prevent future occurrences.
- Actions:** Download the issue summary as a PDF, Track this issue on mobile, Quickly connect with our problem-solving experts, Tweet @AzureSupport.

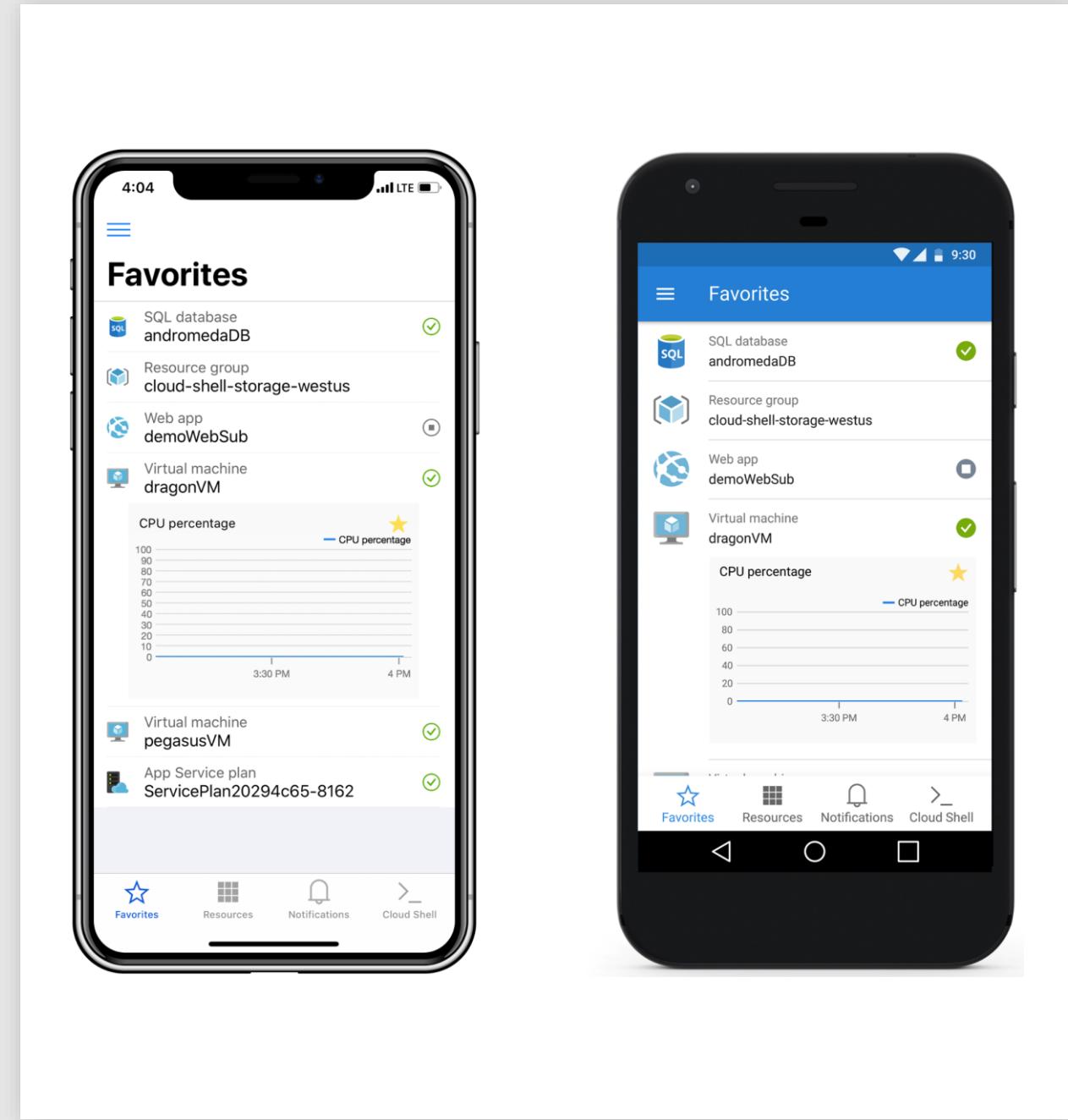
Azure mobile app

Stay connected to your Azure resources—anytime, anywhere

- Monitor the health and status of your Azure resources on the go
- Get quick access to your favorite resources
- Get notifications and alerts about important health issues
- Quickly diagnose and fix issues from your mobile device
- Run Azure Cloud Shell scripts (PowerShell or Bash) from the app
- Azure Alerts can be set up to be sent as push notifications

Now available on iOS and Android

[Learn more.](#)





Azure

Your vision. Your cloud.





Compute:

Compute commonly refers to the collection of cloud computing resources that your application can run on



Compute



Azure Compute: Capabilities & Features

Customer Needs

Lift and shift" of legacy systems into a fully automated infrastructure

Scale out and scale up capabilities

Global scale

Third party line of business applications such as SAP HANA

Designed for high-end workloads

- Virtual Machines
- Virtual Machine Scale Sets
- Disks
- Availability Sets

Compute options for all apps

Intel Haswell E5-2673 v3,
Lowest cost, flexible CPUs
Up to 8vCPUs, 32GB RAM

Intel Xeon E5-2673 v4
(Broadwell), Hyper-Threaded CPUs. Up to 64 vCPUs, 432GB RAM

Intel Broadwell E5-2673 v4
Hyper-Threaded CPUs
Up to 64 vCPU's, 256GB RAM

Intel Xeon E7-8890 v3
(Haswell). Largest VMs in Azure. Up to 128 vCPUs, 4TB RAM

Intel® Xeon® Platinum 8168 processor (Skylake)

Nvidia GPU accelerated compute and Graphics platform featuring Nvidia GRID 2.0 on M60, Tesla P40, P100 and V100 for AI/ML and HPC workloads.

AMD EPYC™7551 processor
8x1.9 TB SSDs

SkyLake Processor - The F-series is hyper-threaded and based on the Intel Xeon® Platinum 8168 (SkyLake) processor

Compute Options

Entry level



Av2

Burstable



B

General Purpose



D

Compute Optimized



F

Storage Optimized



L

Memory Optimized



Ev3

GPU Enabled



NC

NCv2

High Performance Computing



H

Purpose-built Infrastructure



SAP HANA

(Preview)

(Preview)



M

(Preview)

(Preview)

(Preview)

(Preview)

(Preview)

(Preview)

(Preview)

ND

(Preview)

(Preview)

(Preview)

NV

(Preview)

(Preview)

(Preview)

NVv2

(Preview)

(Preview)

(Preview)

NDv2

(Preview)

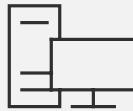
(Preview)

(Preview)

Most comprehensive resiliency and best SLA

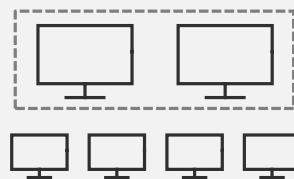
INDUSTRY-ONLY

VM SLA
99.9%



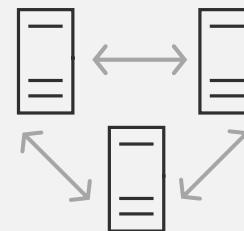
INDUSTRY-LEADING HIGH AVAILABILITY SLA

VM SLA
99.95%



SINGLE VM
Protection with Premium Storage

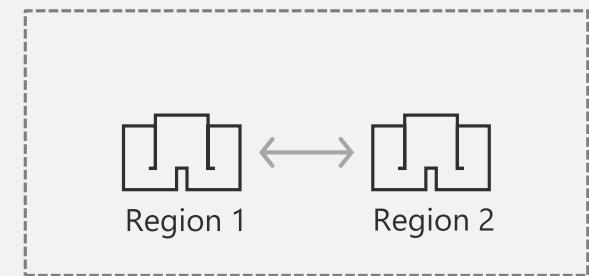
VM SLA
99.99%



AVAILABILITY SETS
Protection against failures within datacenters

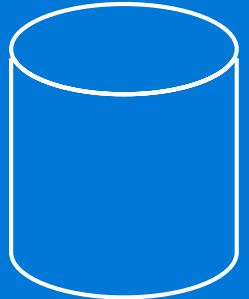
INDUSTRY-LEADING DISASTER RECOVERY

REGIONS
54



AVAILABILITY ZONES
Protection from entire datacenter failures

REGION PAIRS
Protection from disaster with Data Residency compliance



Storage

Azure provides a unified distributed storage system offering durability, **encryption at rest**, strongly consistent **replication**, and auto load-balancing



Azure Storage Features

Customer Needs

High Availability

Data Security

Massive Scalability

Support for Hybrid Storage Scenarios

Azure Storage Options



Disk Storage

Premium, Standard, Ultra
Reliable, persistent, high performing Disk Storage for Virtual Machines



Object Storage

Azure Blobs
Secure, centralized storage target for backup/disaster recovery



File storage

Azure Files Azure NetApp Files
Lift and shift of legacy applications that require file shares to the cloud



Data Transport

Azure Import/Export Azure DataBox
Move or migrate data into Azure



Hybrid Storage

Azure StorSimple
Azure File Sync Avere

Secure, intelligent data tiering between on-premises and cloud storage

Storage Differentiators By Service

Fastest Virtual Disk in the public cloud
Low cost SSD option
Enterprise grade durability with industry leading **ZERO %** Annual Failure Rate

Single Store that allows multiple storage tiers (Hot, Cool, and Archive) to coexist in the same account
Hierarchical File System that supports fine grained ACLs
Azure AD Integration

SMB 3.0 Protocol Support
Only cloud provider with NetApp functionality provided as a First Party service

Multiple services that support transfer of large amounts of data using an appliance or the network: Databox, Databox Edge, Databox Heavy
Only cloud provider with NetApp functionality provided as a First Party service

StorSimple: Hybrid Storage offering that allows automatic tiering of infrequently used data to Azure Blob or File Storage
Avere: Best in class, high performance caching for HPC use cases, available in virtual appliance and hardware form factors

Azure Storage Options

Available in 54 regions

Industry leading durability and availability

Hybrid/Edge Friendly

Azure Disks

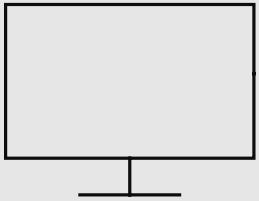
Performance tiers



Premium SSD Disks
Provisioned performance
for Enterprise Prod



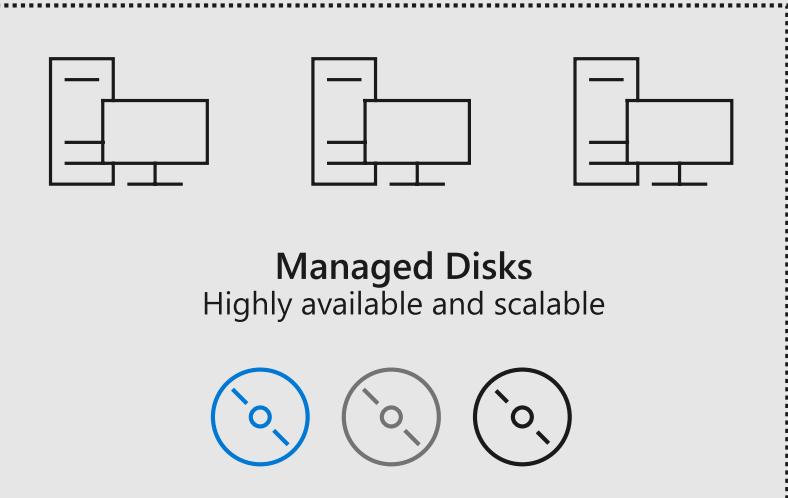
Standard SSD Disks
Cost effective performance
for entry-level workloads



Standard HDD Disks
HDD based, cost effective
for dev-test workloads

Simplified management

Resource Group



Industry leading ZERO%
annual failure rate

Enterprise grade durability
with 3 replicas

Best in class VMs with
high IOPS/BW

80,000 IOPS & 2,000 MB/s
Disk throughput per VM

< 1ms latency for cached
operations

Blob Cache technology
Up to 160,000 IOPS

Developer support

REST API support
Easy migration/DR backup
Rich partner ecosystem

Blob Storage

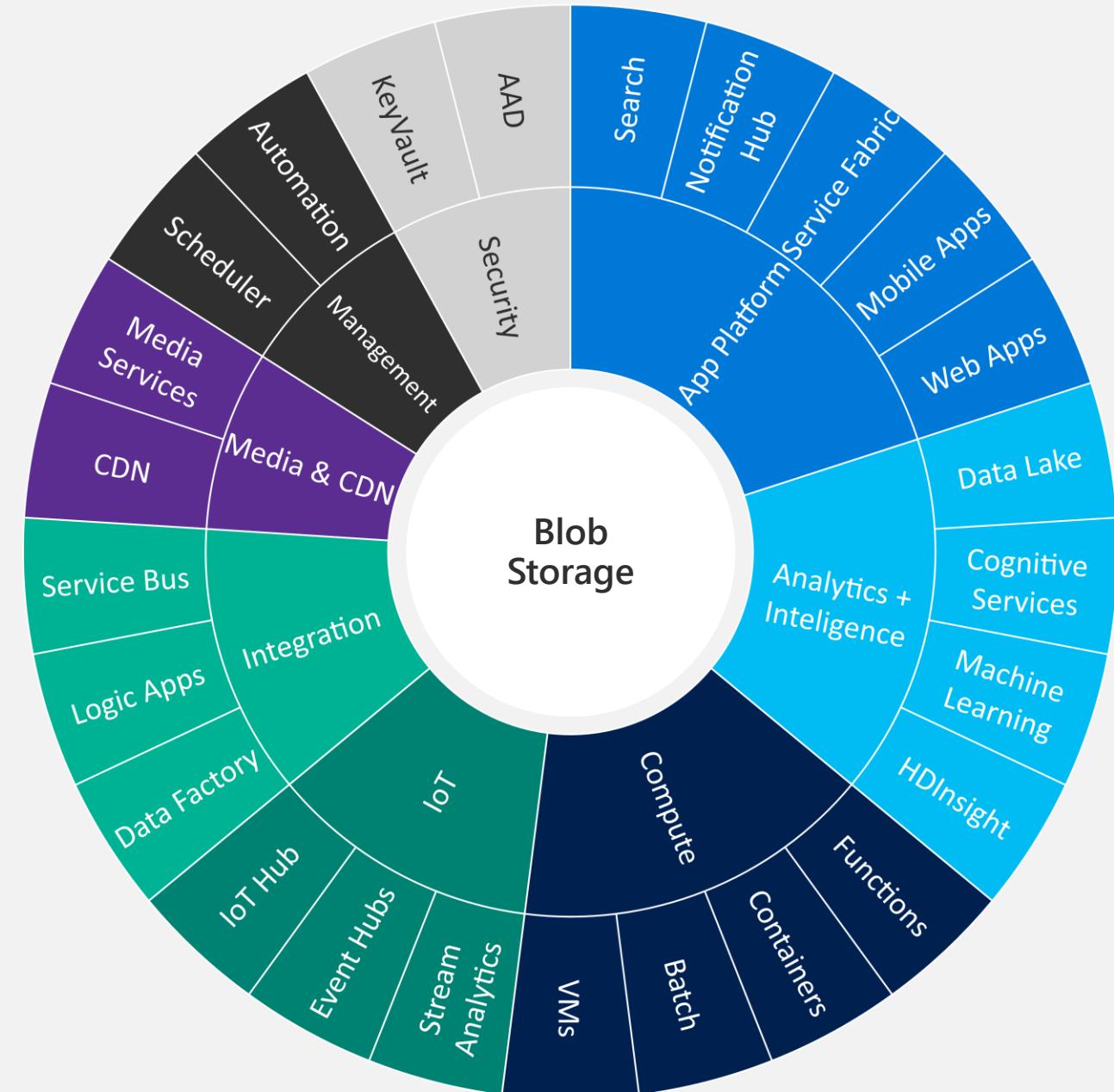
Blob Storage - Azure's Object Storage platform

Store and serve unstructured data

- App and Web scale data
- Backups and Archive
- Big Data from IoT, Genomics, etc.

Broad integration for Blobs across Azure services

Enables many scenarios



Object storage for every use case

Azure Blob



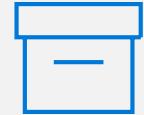
Hot

Frequently
accessed data



Cool

Less frequently
accessed data



Archive

Rarely
accessed data



PER TB
PER MONTH

\$20.80

\$15.20

\$0.99



PER 10K WRITE
OPERATIONS

\$0.05

\$0.10

\$0.10



RETRIEVAL
TIMES

Immediate

Immediate

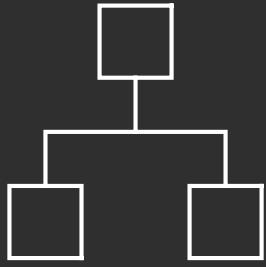
Hours

USE CASES

Cloud native
application data
storage

Repository for
server backups

Medical records
archiving



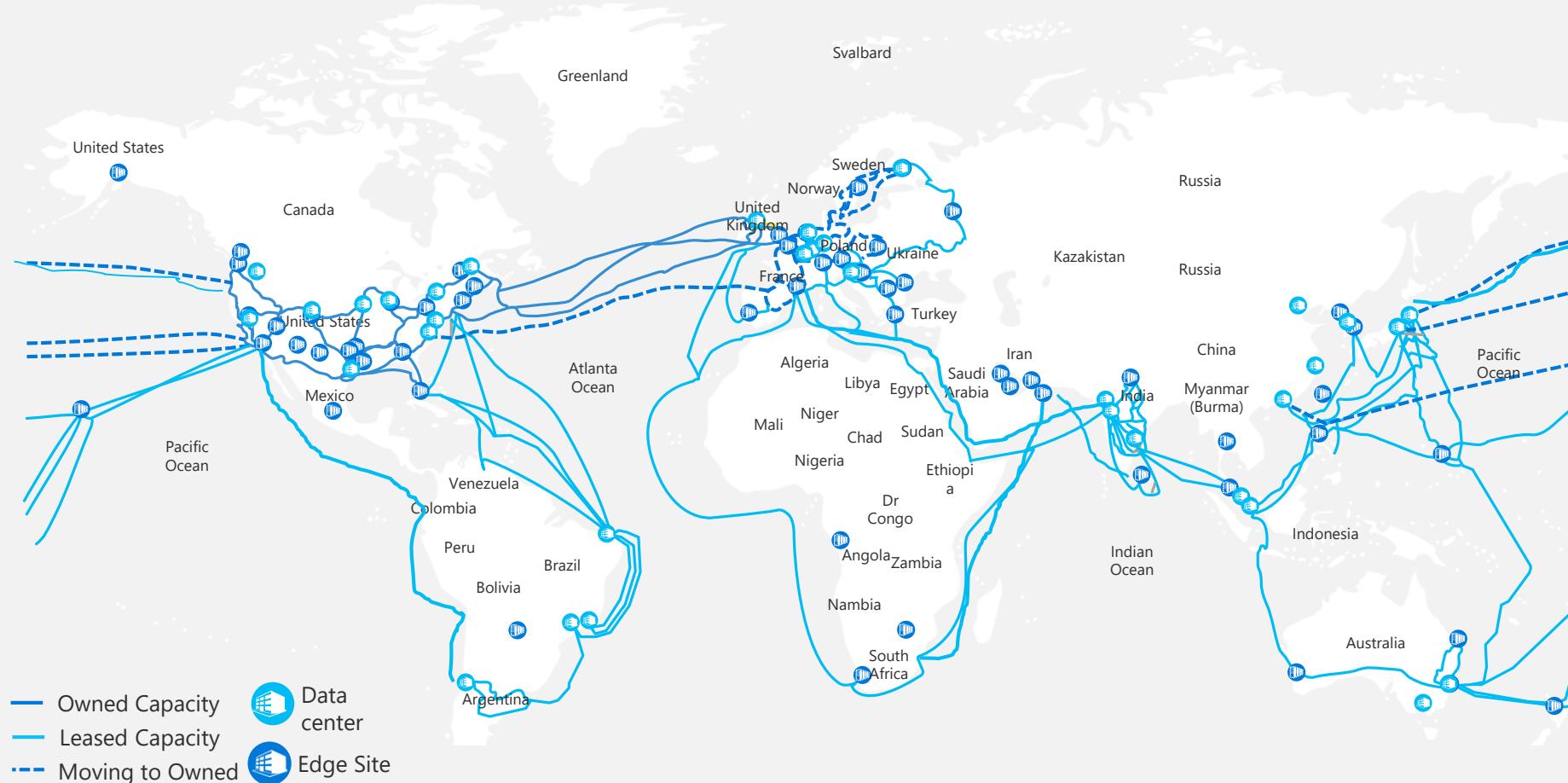
Networking

Allows you to easily provision private networks, securely connecting users to cloud applications, and to your on-premises datacenters

Microsoft Global Network

One of the largest private networks in the world

- 8,000+ ISP sessions
- 130+ edge sites
- 44 ExpressRoute locations
- 33,000 miles of lit fiber
- SDN Managed (SWAN, OLS)



DCs and Network sites not exhaustive



Azure Networking Features

Customer Needs

Seeking isolated and secure environment for your applications

Private network in the cloud

Secure connections with IPSec VPN or ExpressRoute

Microsoft Global Networking

DC Hardware

- SmartNIC/FPGA
- SONiC
- Virtual Networks
- Load Balancing
- VPN Services
- Firewall
- DDoS Protection
- Public and Private DNS
- Traffic Manager

Services

Intra-Region

- DC Networks
- Regional Networks
- Optical Modules

WAN Backbone

- Software WAN
- Subsea Cables
- Terrestrial Fiber
- National Clouds

Edge and ExpressRoute

- Internet Peering
- ExpressRoute

CDN

- Acceleration for applications and content
- E2E monitoring (Network Watcher, Network Performance Monitoring)

Last Mile



Virtual Network

Provision private networks, optionally connect to on-premise datacenters. NSG, User Defined Routes, & IP addresses.



Load Balancer

Deliver high availability and network performance to your applications



Application Gateway/WAF

Build scalable and highly-available web front ends in Azure



DDoS Protection

Protect your Azure resources from DDoS attacks



VPN Gateway

Establish secure, cross-premise connectivity



Azure DNS

Host your DNS domain in Azure for better scale, cost and performance



Content Delivery Network

Ensure fast, secure, reliable content delivery with broad global reach



Traffic Manager

Route incoming traffic for high performance, availability, disaster recovery, Blue/Green deployments, etc.



ExpressRoute

Dedicated private network fiber connections to Azure



Network Watcher

Network performance monitoring and diagnostics solution



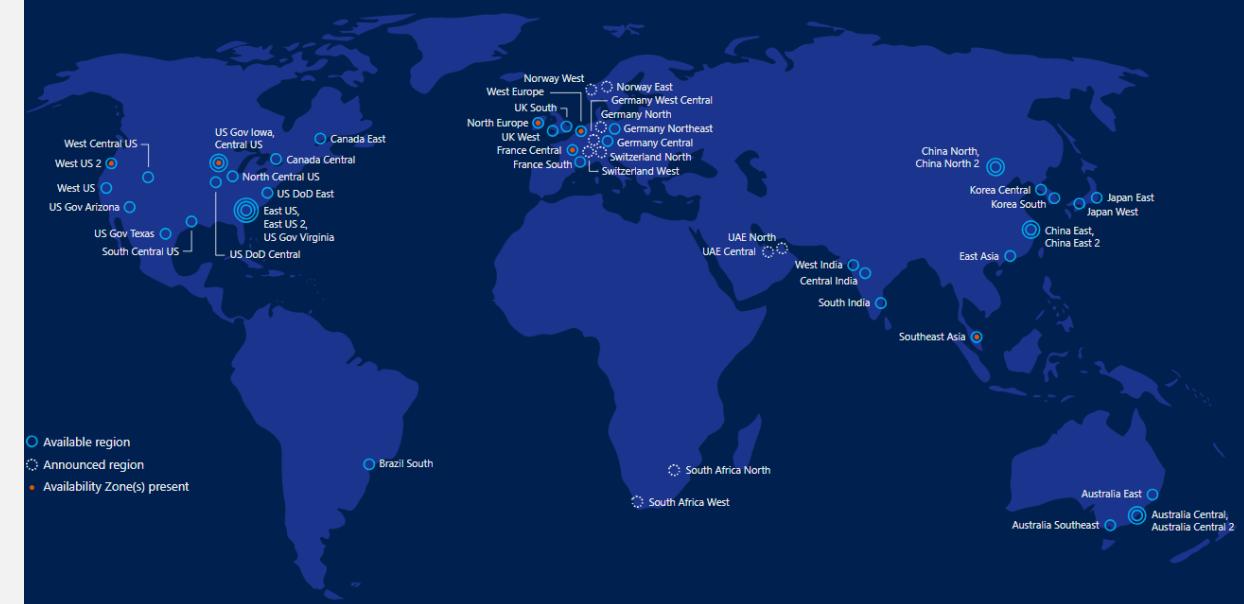
A fully stateful firewall as a service with built-in high availability and unrestricted cloud scalability.

Microsoft Global Network

One of the largest private networks in the world

54 regions worldwide

140 available in 140 countries





Security & Management

Microsoft Azure helps protect your digital transformation by providing a secure foundation for cloud workloads, multi-layered and built-in security controls, and unparalleled threat intelligence



Customer Needs

Security



[Azure Active Directory](#)
Cloud based directory and identity management



[Azure Security Center](#)
Prevent, detect, and respond to threats with increased visibility



[Azure Key Vault](#)
Protect passwords and keys securely

Management



[Azure Backup](#)
Protect your virtual machines, data, or enterprise workloads by securely backing it up to Azure



[Azure Resource Manager](#)
Organize, deploy and control resources in Azure



[Cloud Shell](#)
Microsoft-managed admin machine in Azure, for Azure



[Azure Policy](#)
Control and governance at scale for your Azure resources

Security

Privacy

Compliance

Transparency



[Azure Advisor](#)
Optimize across four different areas: high availability, performance, security, and cost



[Azure Log Analytics](#)
Collect, search, and visualize machine data from on-premises and cloud



[Encryption](#)
Built in encryption for azure SQL service, Disk/VM Disk encryption, and storage



[Azure Site Recovery](#)
Orchestrated failovers/back to Azure, Azure to Azure or data center to data center—great for migration



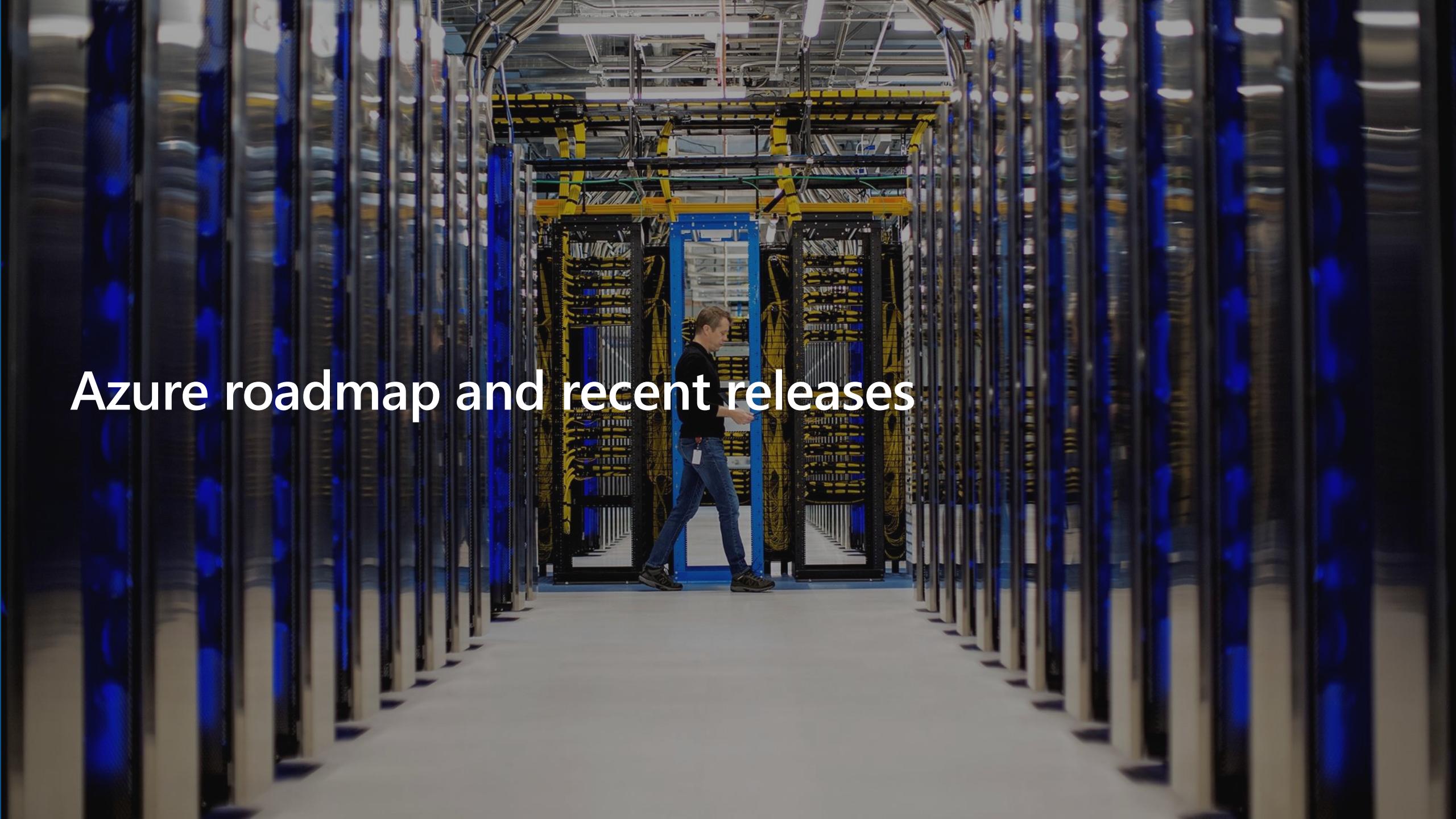
[Cost Management](#)
Monitor, allocate and optimize your cloud spend to accelerate your future investment with confidence



[Azure Monitor](#)
Granular, real-time data monitoring in one location

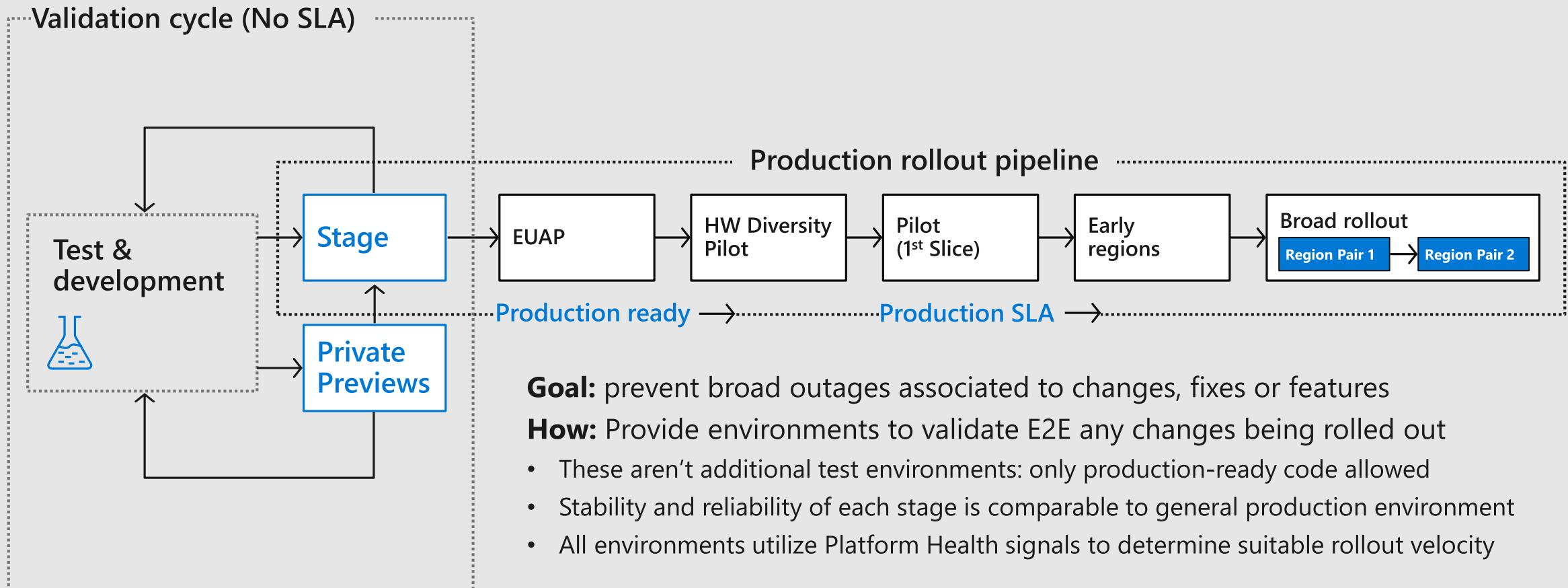


[Log Analytics](#)
Develop deep insights using purpose-built management solutions

A photograph of a person standing in a server room. The person is wearing a dark long-sleeved shirt, blue jeans, and black shoes. They are looking down at a device in their hands. The room is filled with tall server racks on both sides, with many yellow and grey cables running across the ceiling and between the racks. The floor is a light-colored polished concrete.

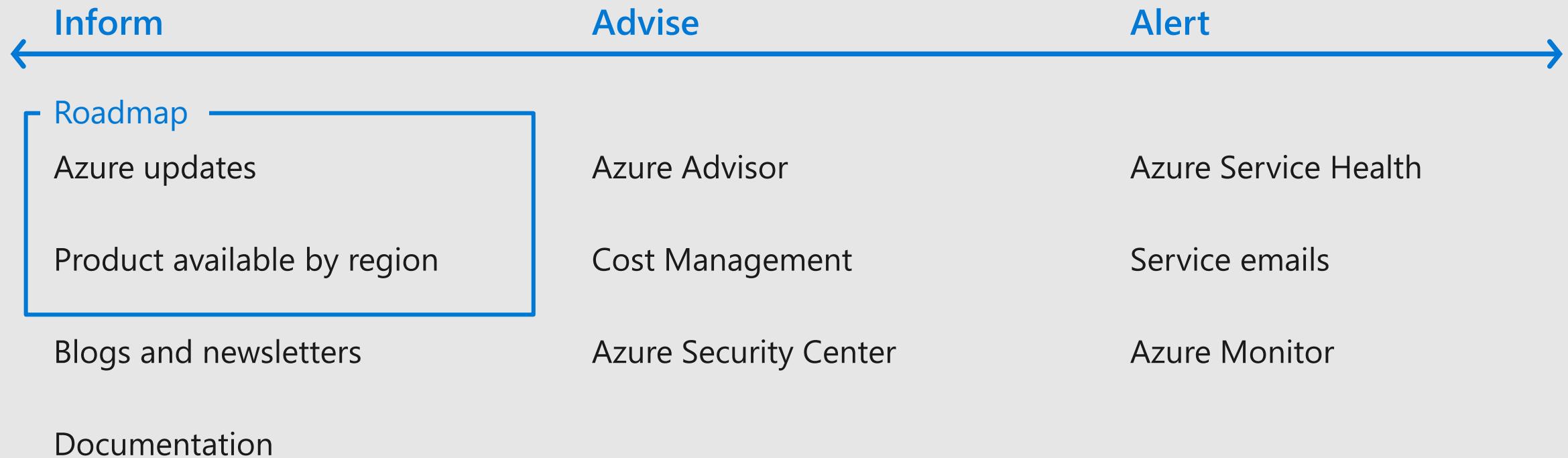
Azure roadmap and recent releases

Azure investment in change automation: Our safe deployment practices (simplification)



Increasing cost and impact of failures →

How does Azure communicate at scale?



How we listen at scale:

Service telemetry

Support requests

User voice

Research

Events

Community

Stay informed of changes in Azure

[Azure.com/updates](#)

Azure updates is where you go for product updates and roadmap changes

Filter by products and the types of updates of interest

Subscribe to customized RSS Feed to stay informed on updates you care about

Includes packaging, licensing and region availability changes

[Azure.com/productsbyregion](#)

Products available by region shows what features/services are available and where

Source of truth—integrated with engineering roadmap tools to deliver future release timeframes for services in Preview or Future Availability

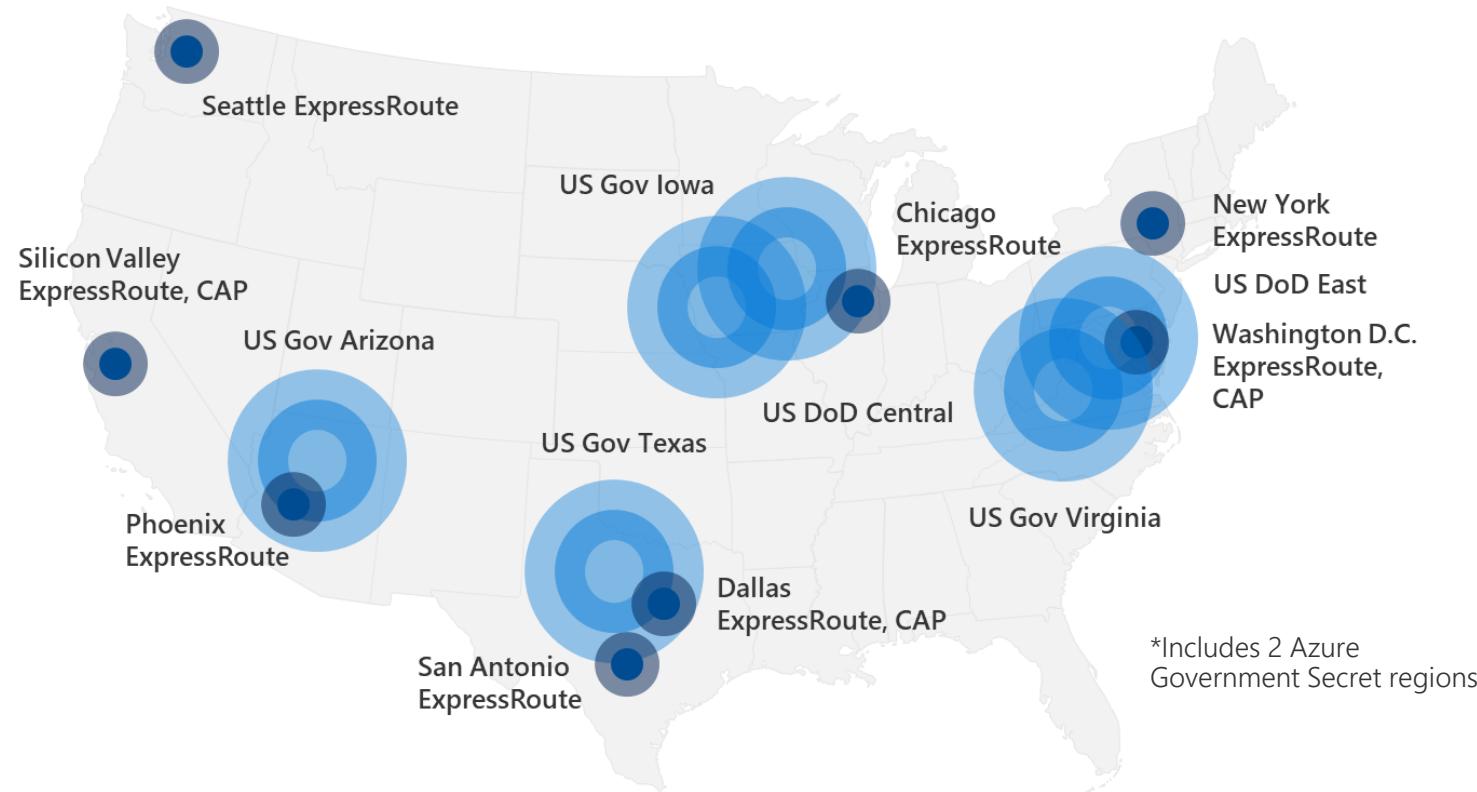
The screenshot shows the Microsoft Azure website with the URL [Azure.com/productsbyregion](#). The page title is "Products available by region". It features a search bar and a table showing the availability of various Azure services across different regions. The table includes columns for CANADA, EUROPE, UNITED KINGDOM, and UNITED STATES. A legend at the top right indicates three levels of availability: "Generally Available" (solid blue square), "In Preview" (blue square with a white circle), and "Future availability" (blue square with a diagonal line). The table lists services like Azure Databricks, Azure Batch AI, Azure Bot Service, Azure Search, and Cognitive Search, each with a row of status indicators corresponding to the regions.

Products	CANADA	EUROPE	UNITED KINGDOM	UNITED STATES
AI + MACHINE LEARNING	Non-regional	Canada Central Canada East North Europe West Europe	UK South UK West	Central US East US East US 2 No
Azure Databricks		■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
Azure Batch AI			□ □ □	□ □ □
Azure Bot Service	■			
Azure Search		■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
Cognitive Search			□ □	



Azure Government

Azure Government Regions



8 Gov Regions Announced



8 ExpressRoute Locations Announced



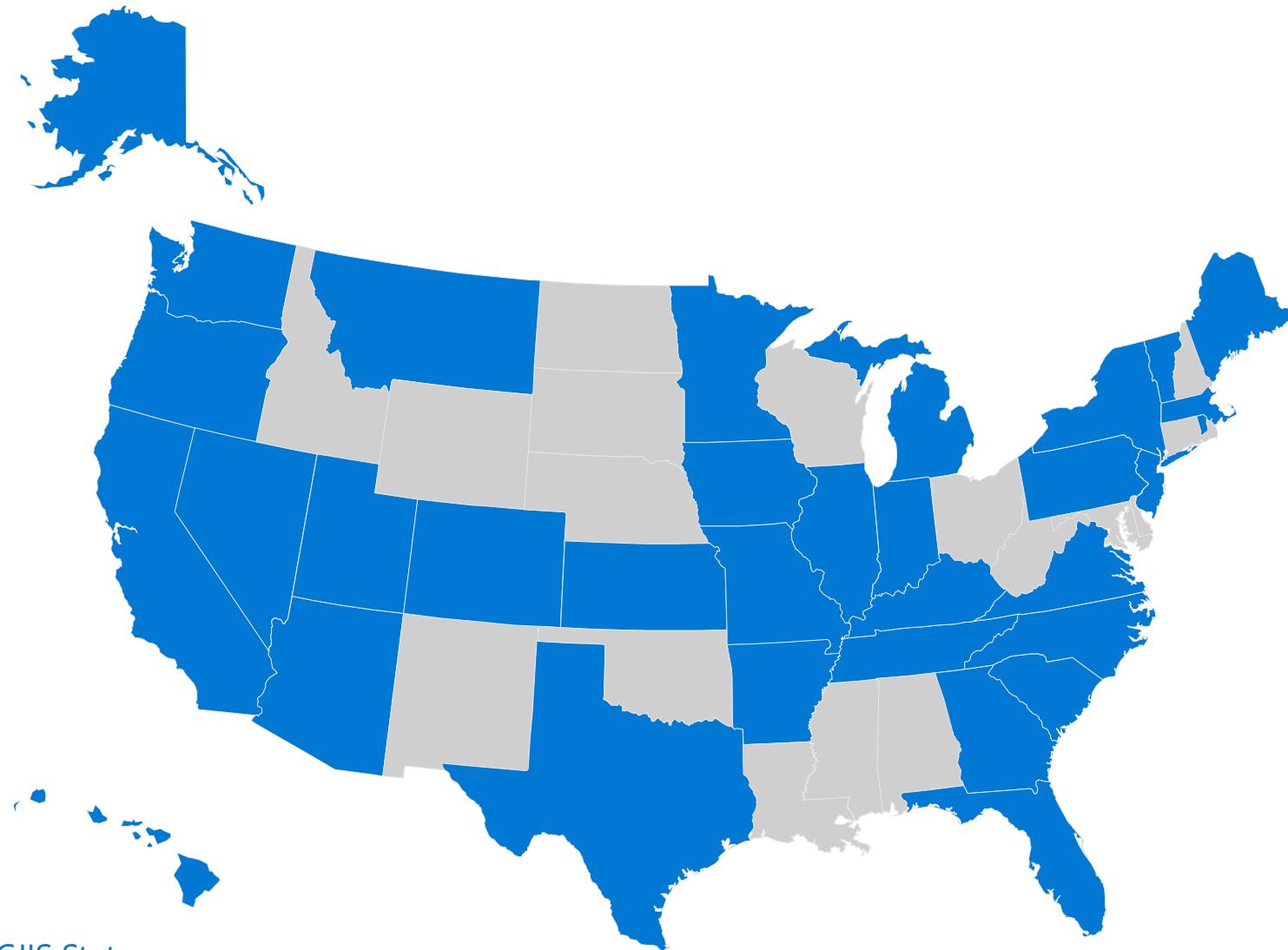
Azure Government offers 8 dedicated regions, including 2 new regions for Azure Government Secret

The most trusted and compliant cloud

GLOBAL																	
	ISO 27001	ISO 27018	ISO 27017	ISO 22301	ISO 9001	SOC 1 Type 2	SOC 2 Type 2	SOC 3	CSA STAR Self-Assessment	CSA STAR Certification	CSA STAR Attestation						
US GOV																	
	Moderate JAB P-ATO	High JAB P-ATO	DoD DISA SRG Level 2	DoD DISA SRG Level 4	DoD DISA SRG Level 5	SP 800-171	FIPS 140-2	Section 508 VPAT	ITAR	CJIS	IRS 1075						
INDUSTRY																	
	PCI DSS Level 1	CDSA	MPAA	FACT UK	Shared Assessments	FISC Japan	HIPAA/ HITECH Act	HITRUST	GxP 21 CFR Part 11	MARS-E	IG Toolkit UK	FERPA	GLBA	FFIEC			
REGIONAL																	
	Argentina PDPA	EU Model Clauses	UK G-Cloud	China DJCP	China GB 18030	China TRUCS	Singapore MTCS	Australia IRAP/CCSL	New Zealand GCIO	Japan My Number Act	ENISA IAF	Japan CS Mark Gold	Spain ENS	Spain DPA	India MeitY	Canada Privacy Laws	Germany IT Grundschutz workbook

[Trust Center](#)

Comprehensive and open cloud for State and Local government



Meeting security and compliance requirements for state and local government. Largest number of states for CJIS covering 2/3 of the population.

FedRAMP

67 Azure Government services authorized

API Management	Application Gateway	Automation	Azure Active Directory (AAD) Free	Azure Active Directory (AAD) Premium P1 + P2	Azure Advisor	Azure Analysis Services	Azure Backup	Azure Cosmos DB	Azure DB for MySQL	Azure DB for PostgreSQL
Azure DNS	Azure File Sync	Azure Front Door	Azure Information Protection	Azure Intune	Azure IoT Hub	Azure Lab Services	Azure Migrate	Azure Monitor	Azure Policy	Azure Portal
Azure Resource Manager (ARM)	Azure Security Center	Azure Service Manager (RDRE)	Azure Site Recovery	Batch	Blob Storage	Cloud Services	Disk Storage	Event Hubs	ExpressRoute	File Storage
Functions	HDInsight	Import/Export	Key Vault	Load Balancer	Log Analytics	Logic Apps	Media Services	Microsoft Azure Government Management Portal	Microsoft Flow	Microsoft Graph
Microsoft PowerApps	Microsoft Stream	Multi-factor Authentication (MFA)	Network Watcher	Notification Hubs	Power BI	Power BI Embedded	Queue Storage	Redis Cache	Scheduler	Service Fabric
Services Bus	SQL Data Warehouse	SQL Database	SQL Server Stretch Database	StorSimple	Table Storage	Traffic Manager	Virtual Machines	Virtual Machines Scale Sets (VMSS)	Virtual Network	VPN Gateway
■ New FedRAMP High Services										

Azure Government Marketplace

Hundreds of custom solutions

Over 350 Partners

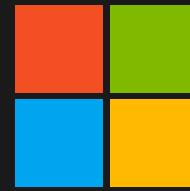
Over 1.5 million marketplace hours used every month



Resources

- Azure Government Site
aka.ms/azure.com/gov
- Azure Starter Packs
aka.ms/azurestarterpacks
- Azure Government Blog
aka.ms/govblog
- Azure Government Documentation
aka.ms/azuregovdocs
- Azure Government Video Library
aka.ms/azuregovvideos
- Azure Government DC User Community
aka.ms/meetup.com/DCAzureGov
- Azure Government Free Trial
aka.ms/azuregovtrial
- Azure Government Meetup Channel
aka.ms/azuregovmeetupchannel

GeekWire



Microsoft Azure

Productive + Hybrid + Intelligent + Trusted

Appendix

Azure covers 91 compliance offerings

Azure has the deepest and most comprehensive compliance coverage in the industry

Global	US Gov	Industry	Regional
<ul style="list-style-type: none">• ISO 27001:2013• ISO 27017:2015• ISO 27018:2014• ISO 22301:2012• ISO 9001:2015• ISO 20000-1:2011• SOC 1 Type 2• SOC 2 Type 2• SOC 3• CIS Benchmark• CSA STAR Certification• CSA STAR Attestation• CSA STAR self-assessment• WCAG 2.0 (ISO 40500:2012)	<ul style="list-style-type: none">• FedRAMP high• FedRAMP moderate• EAR• ITAR• DoD DISA SRG Level 5• DoD DISA SRG Level 4• DoD DISA SRG Level 2• DFARS• DoE 10 CFR Part 810• NIST SP 800-171• NIST CSF• Section 508 VPATs• FIPS 140-2• CJIS• IRS 1075• CNSSI 1253	<ul style="list-style-type: none">• PCI DSS Level 1• GLBA (US)• FFIEC (US)• Shared assessments (US)• SEC 17a-4 (US)• CFTC 1.31 (US)• FINRA 4511 (US)• SOX (US)• 23 NYCRR 500 (US)• OSFI (Canada)• FCA + PRA (UK)• APRA (Australia)• FINMA (Switzerland)• FSA (Denmark)• RBI + IRDAI (India)• MAS + ABS (Singapore)• NBB + FSMA (Belgium)	<ul style="list-style-type: none">• AFM + DNB (Netherlands)• AMF + ACPR (France)• KNF (Poland)• European Banking Authority (EBA)• FISC (Japan)• HIPAA BAA (US)• HITRUST certification• GxP (FDA 21 CFR Part 11)• MARS-E (US)• NHS IG Toolkit (UK)• NEN 7510:2011 (Netherlands)• FERPA (US)• CDSA• MPAA (US)• FACT (UK)• DPP (UK)• TISAX (Germany)

<https://aka.ms/AzureCompliance>